



UnionPay BIN 81 Test Card Set

Version 1.11

June 2019

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B2 Contact Information

251 Consumers Road, Suite 1200, Toronto, ON M2J 4R3
555 Northpoint Center, Suite 400, Alpharetta, GA 30022
Tel: 416.730.9827 www.b2ps.com

Revision History

Version	Date	Updated By	Revisions
1.00	December 19 , 2018	B2PS	<ul style="list-style-type: none">• Initial document release
1.10	March 6, 2019	B2PS	<ul style="list-style-type: none">• Added PIN Value advisory
1.11	June 18, 2019	B2PS	<ul style="list-style-type: none">• Set references to "UL" removed. No change to cards themselves.

Table of Contents

Chapter 1 - UnionPay QP BIN 81 Test Card Set Profiles	2
1.1 Test Card FT27 / QPC20 - UnionPay, DI, 1-AID, English, CHN, CNY	4
1.1.1 Contact: CVM List - AID A000000333010102, EMV, 1 st GAC ARQC	4
1.1.2 Contact: Application Tag data, AID A000000333010102	4
1.1.3 Contact: CVM List - AID A000000333010102, Low-Value	7
1.1.4 Contact: Application Tag data, AID A000000333010102	7
1.1.5 Contact: CVM List - AID A000000333010102, Dual-Currency, Low Value	10
1.1.6 Contact: Application Tag data, AID A000000333010102	10
1.1.7 Contactless: Application Tag data, AID A000000333010102, qPBOC online	13
1.1.8 Contactless: Application Tag data, AID A000000333010102, qPBOC offline	14
1.1.9 Contactless: CVM List - AID A000000333010102, Debit/Credit	15
1.1.10 Contactless: Application Tag data, AID A000000333010102	15
1.2 Test Card FT28 / QPC21 - UnionPay, DI, 1-AID, English, CHN, CNY	18
1.2.1 Contact: CVM List - AID A000000333010103, EMV, 1 st GAC ARQC	18
1.2.2 Contact: Application Tag data, AID A000000333010103	18
1.2.3 Contact: CVM List - AID A000000333010103, Low-Value	21
1.2.4 Contact: Application Tag data, AID A000000333010103	21
1.2.5 Contact: CVM List - AID A000000333010103, Dual-Currency, Low Value	25
1.2.6 Contact: Application Tag data, AID A000000333010103	25
1.2.7 Contactless: Application Tag data, AID A000000333010103, qPBOC online	28
1.2.8 Contactless: Application Tag data, AID A000000333010103, qPBOC offline	29
1.2.9 Contactless: CVM List - AID A000000333010103, Debit/Credit	30
1.2.10 Contactless: Application Tag data, AID A000000333010102	30
1.3 Test Card FT29 / QPC22 - UnionPay, DI, 1-AID, Chinese, CHN, CNY	33
1.3.1 Contact: CVM List - AID A000000333010101, EMV, 1 st GAC ARQC	33
1.3.2 Contact: Application Tag data, AID A000000333010101	33
1.3.3 Contact: CVM List - AID A000000333010101, Low-Value	37
1.3.4 Contact: Application Tag data, AID A000000333010101	37
1.3.5 Contact: CVM List - AID A000000333010101, Dual-Currency, Low Value	40
1.3.6 Contact: Application Tag data, AID A000000333010101	40
1.3.7 Contactless: Application Tag data, AID A000000333010101, qPBOC online	43
1.3.8 Contactless: Application Tag data, AID A000000333010101, qPBOC offline	44
1.3.9 Contactless: CVM List - AID A000000333010101, Debit/Credit	45
1.3.10 Contactless: Application Tag data, AID A000000333010101	45
1.4 Test Card B1 - UnionPay, Magstripe-Only, Fallback card.....	48
1.5 Test Card B2 - UnionPay, Magstripe-Only, Fallback card.....	48
1.6 Test Card B3 - UnionPay, Magstripe-Only, Fallback card.....	48
Chapter 2 - ASCII Character Conversion Chart.....	49

CAUTION

Multiple consecutive incorrect PIN entry attempts may result in the card being blocked.
This is known as being 'PIN Blocked'.
If this occurs, it will no longer be possible to enter an Offline PIN,
which will cause all future transactions to be declined.

***** It is not possible to unblock a 'PIN Blocked' card *****

PIN Values

The default PIN value for UnionPay test cards is '111111'.
This may not be applicable in all test scenarios or host environments.

Chapter 1 - UnionPay QP BIN 81 Test Card Set Profiles

This UnionPay BIN 81 Test Card Set contains 3 EMV test cards and 3 magstripe (Fallback) cards.



	Test Card FT27 / QPC20	Test Card FT28 / QPC21	Test Card FT29 / QPC22
Brand	UnionPay	UnionPay	UnionPay
Description (Card - Types)	Credit	Debit	Credit
AID list	A000000333010102	A000000333010103	A000000333010101
PAN list	8171 9999 0000 0018	81719 99900 00000 0021	8163 9999 00010
Expiry Date	10/2030	10/2030	10/2030
Service Code	201	201	201
Interface	Contact, Contactless, MSR	Contact, Contactless, MSR (no content)	Contact, Contactless, MSR
CVM	See card definition	See card definition	See card definition
Approval Amount	\$10.00	\$10.00	\$10.00
Issuer Country Code	156 - CHN	156 - CHN	156 - CHN
Application Currency Code	156 - CNY	156 - CNY	156 - CNY
Language	'zh' - Chinese	'zh' - Chinese	'zh' - Chinese
Card Version	v9.1 / v1.0	v9.1 / v1.0	v9.1 / v1.0

	Test Card B1	Test Card B2	Test Card B3
Brand	UnionPay	UnionPay	UnionPay
Description (Card - Types)	Credit	Credit	Credit
AID list	-	-	-
PAN list	8171 9999 2766 0000	8163 9999 3987 0068	81639 99900 96640 6888
Expiry Date	10/2030	10/2030	10/2030
Service Code	121	121	121
Interface	MSR	MSR	MSR
CVM	-	-	-
Approval Amount	\$10.00	\$10.00	\$10.00
Issuer Country Code	-	-	-
Application Currency Code	-	-	-
Language	-	-	-
Card Version	v1.2	v1.2	v1.2

1.1 Test Card FT27 / QPC20 - UnionPay, DI, 1-AID, English, CHN, CNY

A Dual Interface, single-AID(UnionPay) credit card with an Issuer Country Code of 'China' and Currency Code of 'CNY'. Languages supported include Chinese.

The recommended transaction amount to generate a host approval is \$10.00.

1.1.1 Contact: CVM List - AID A00000333010102, EMV, 1st GAC ARQC

Cardholder Verification Method List ('4203 1E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.1.2 Contact: Application Tag data, AID A00000333010102

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 18 D3 01 02 01 00 00 00 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 71 99 99 00 00 00 18	
5F 20	Cardholder Name	20 2F - ' /'	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 02	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 42 03 1E 03 1F 00	
8F	Certification Authority Public Key Index	0B	

Tag	Element name	Data	Card v9.1 / v1.0
90	Issuer Public Key Certificate	56 77 7D D7 50 F1 59 81 7E 9F 33 35 60 5B 07 18 A5 6C 98 3C CB 5D 2E 28 6E 8E 72 24 C7 76 06 36 D5 80 A1 9A C1 98 D5 30 46 B4 CB EA 27 49 63 E4 E9 6C 24 DA 0B 65 D9 58 D4 C2 08 0E E0 F9 0F 67 99 36 1E FC AE 33 14 68 5F 5C D9 12 5F C1 3A 32 3A 3B B5 49 B3 81 5D 14 08 D8 26 54 42 B2 68 FB E8 0C 32 04 BD 81 20 85 4F 10 AD 5A 1A 60 23 CC FB 46 DE 08 C6 F8 7E F7 95 E5 6E D3 6B 66 11 F6 C9 40 18 8D 91 D6 6A 9B 2D 27 16 FE 16 23 64 80 FC 44 27 2F BE 31 65 D4 21 96 3A 06 25 16 0E 7E F5 47 75 EE 9B BA 05 64 C3 02 05 D7 F2 71 E2 52 34 9D 53 62 D0 4B EC 83 EB FD F7 65 79 7E 84 71 7D 15 48 4E 0A 46 7C D6 3A 30 20 77 B5 F2 34 E8 12 FC 31 78 7D DA 37 C6 9F 06 28 BC AE A6 B1 FB 40 4F E2 85 CE 25 B7 C5 E5 35 0E 43 A9 C4 46 E2 45 E6 13 4B 4C D3 02 FA	
93	Signed Static Application Data	7F 96 00 BC C0 93 25 4F A0 BB 98 15 55 45 4D 02 19 73 D1 5C 77 8A 36 29 65 4D 1F 5C EF 33 B5 64 95 7F 8D 70 17 67 2D 15 31 18 89 B9 2E 89 10 A6 F5 86 8F B2 6B 5F D5 EF 45 90 69 EF F8 6E 2D 10 BF EE F0 61 5E F4 13 61 A0 F5 AE 61 72 4B 78 19 79 BB 5A C4 E4 93 DF DA 33 7C 7D CC 03 80 1B 09 C8 4A 3E F7 DF A0 1A AB 02 A1 44 0D A8 55 9E 84 03 08 C7 66 10 8F FE 11 84 77 35 0E 51 09 12 24 4E 03 1D DF 0D 27 57 A3 E0 9E 5F 3C 49 EF 4F 3E	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 9C A8 00	
9F 0E	Issuer Action Code - Denial	00 10 00 00 00	
9F 0F	Issuer Action Code - Online	D8 68 9C F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	

Tag	Element name	Data	Card v9.1 / v1.0
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 02 06 5F 2A 02	
9F 42	Application Currency Code	01 56 - CNY	
9F 46	ICC Public Key Certificate	AA 1C 39 30 A0 3C 84 4C 10 32 47 35 9A 6E 30 C1 B3 45 81 82 F5 EE 8D C9 BE D9 80 F2 7B BC 8B 1C 38 FE 73 8B 6C 6F EC D6 DB 56 03 5C 44 51 FE B6 3B 17 BB 00 11 73 0B 4C E8 B8 7D 0A 46 19 23 10 B3 97 5E 96 CF 3E 64 39 9F 8C 79 27 DE 63 1A 2E 8C 1E F9 87 BC CB 32 68 E4 37 E0 A2 18 0B 15 97 2E 9A 01 5B 9C 16 A2 CF C5 21 80 71 A5 A0 6B 1C 5B CA 65 B5 59 06 3B F0 84 AF 18 3D 73 6C A7 FB 0B 21 43 3F 1A 8D 1D A4 BB C5 25 05 70 46 28 B2	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	5C 02 C5 42 12 75 7A 44 97 6C 5D 6C 10 C2 18 19 49 9E 05 D5 9D 77 0A FA 82 0F	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4B	Signed Dynamic Application Data	C7 2F D7 3C 94 43 0B AE 36 13 57 0A 61 A8 5A 09 43 EC C1 FA 18 52 88 FD EC AC E7 44 1B B8 15 69 DF A2 4F 65 44 3A 57 F0 2F AE 2E 4D A7 D3 95 90 3E C0 F2 4E 79 5F 17 AC 38 BD CE 48 13 7A 6A 47 63 80 3D 60 C0 A1 06 0B 47 EB 20 F5 98 36 B0 C7 D8 13 9B 1E F1 9D 8D C3 E9 AB 42 A0 D5 58 24 72 6F DB 92 D5 E6 95 F2 6F 1F 58 60 F6 B3 D6 B1 EE 90 29 9A 1E 83 9B 86 9F 2E 80 0E 96 3B 06 E7 D4	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.1.3 Contact: CVM List - AID A00000333010102, Low-Value

Cardholder Verification Method List ('4203 1E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.1.4 Contact: Application Tag data, AID A00000333010102

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 18 D3 01 02 01 00 00 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 71 99 99 00 00 00 18	
5F 20	Cardholder Name	20 2F - ' /'	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 02	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 42 03 1E 03 1F 00	
8F	Certification Authority Public Key Index	0B	

Tag	Element name	Data	Card v9.1 / v1.0
90	Issuer Public Key Certificate	56 77 7D D7 50 F1 59 81 7E 9F 33 35 60 5B 07 18 A5 6C 98 3C CB 5D 2E 28 6E 8E 72 24 C7 76 06 36 D5 80 A1 9A C1 98 D5 30 46 B4 CB EA 27 49 63 E4 E9 6C 24 DA 0B 65 D9 58 D4 C2 08 0E E0 F9 0F 67 99 36 1E FC AE 33 14 68 5F 5C D9 12 5F C1 3A 32 3A 3B B5 49 B3 81 5D 14 08 D8 26 54 42 B2 68 FB E8 0C 32 04 BD 81 20 85 4F 10 AD 5A 1A 60 23 CC FB 46 DE 08 C6 F8 7E F7 95 E5 6E D3 6B 66 11 F6 C9 40 18 8D 91 D6 6A 9B 2D 27 16 FE 16 23 64 80 FC 44 27 2F BE 31 65 D4 21 96 3A 06 25 16 0E 7E F5 47 75 EE 9B BA 05 64 C3 02 05 D7 F2 71 E2 52 34 9D 53 62 D0 4B EC 83 EB FD F7 65 79 7E 84 71 7D 15 48 4E 0A 46 7C D6 3A 30 20 77 B5 F2 34 E8 12 FC 31 78 7D DA 37 C6 9F 06 28 BC AE A6 B1 FB 40 4F E2 85 CE 25 B7 C5 E5 35 0E 43 A9 C4 46 E2 45 E6 13 4B 4C D3 02 FA	
93	Signed Static Application Data	7F 96 00 BC C0 93 25 4F A0 BB 98 15 55 45 4D 02 19 73 D1 5C 77 8A 36 29 65 4D 1F 5C EF 33 B5 64 95 7F 8D 70 17 67 2D 15 31 18 89 B9 2E 89 10 A6 F5 86 8F B2 6B 5F D5 EF 45 90 69 EF F8 6E 2D 10 BF EE F0 61 5E F4 13 61 A0 F5 AE 61 72 4B 78 19 79 BB 5A C4 E4 93 DF DA 33 7C 7D CC 03 80 1B 09 C8 4A 3E F7 DF A0 1A AB 02 A1 44 0D A8 55 9E 84 03 08 C7 66 10 8F FE 11 84 77 35 0E 51 09 12 24 4E 03 1D DF 0D 27 57 A3 E0 9E 5F 3C 49 EF 4F 3E	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 9C A8 00	
9F 0E	Issuer Action Code - Denial	00 10 00 00 00	
9F 0F	Issuer Action Code - Online	D8 68 9C F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	

Tag	Element name	Data	Card v9.1 / v1.0
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 02 06 5F 2A 02	
9F 42	Application Currency Code	01 56 - CNY	
9F 46	ICC Public Key Certificate	AA 1C 39 30 A0 3C 84 4C 10 32 47 35 9A 6E 30 C1 B3 45 81 82 F5 EE 8D C9 BE D9 80 F2 7B BC 8B 1C 38 FE 73 8B 6C 6F EC D6 DB 56 03 5C 44 51 FE B6 3B 17 BB 00 11 73 0B 4C E8 B8 7D 0A 46 19 23 10 B3 97 5E 96 CF 3E 64 39 9F 8C 79 27 DE 63 1A 2E 8C 1E F9 87 BC CB 32 68 E4 37 E0 A2 18 0B 15 97 2E 9A 01 5B 9C 16 A2 CF C5 21 80 71 A5 A0 6B 1C 5B CA 65 B5 59 06 3B F0 84 AF 18 3D 73 6C A7 FB 0B 21 43 3F 1A 8D 1D A4 BB C5 25 05 70 46 28 B2	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	5C 02 C5 42 12 75 7A 44 97 6C 5D 6C 10 C2 18 19 49 9E 05 D5 9D 77 0A FA 82 0F	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4B	Signed Dynamic Application Data	BF 1A 2C 87 E8 27 49 EF E8 E8 EB FA 42 02 4C 08 96 F5 C1 1B 40 B6 8E 14 A3 AF F6 75 2D 75 1A 81 1B FD 47 A4 45 90 B3 CD 9E F6 D2 25 FA 21 49 74 8A 27 E1 C2 D4 C6 BA 54 79 E3 19 55 38 BD 7B 0E 49 1A 1F 54 DF 0F 00 8D 59 8B 2D 27 D4 3F 75 A2 EB C0 B4 E1 7A D5 F3 E6 F3 BF 5A 6C 0B 9F EE DD A5 F7 4F 26 AA 3A 91 F5 9F 26 03 71 92 30 36 0A 62 1B 48 82 BD 43 83 70 2E 8A 70 90 77 6B 27 DC	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.1.5 Contact: CVM List - AID A00000333010102, Dual-Currency, Low Value

Cardholder Verification Method List ('4203 1E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.1.6 Contact: Application Tag data, AID A00000333010102

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 18 D3 01 02 01 00 00 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 71 99 99 00 00 00 18	
5F 20	Cardholder Name	20 2F - ' /'	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 02	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 42 03 1E 03 1F 00	
8F	Certification Authority Public Key Index	0B	

Tag	Element name	Data	Card v9.1 / v1.0
90	Issuer Public Key Certificate	56 77 7D D7 50 F1 59 81 7E 9F 33 35 60 5B 07 18 A5 6C 98 3C CB 5D 2E 28 6E 8E 72 24 C7 76 06 36 D5 80 A1 9A C1 98 D5 30 46 B4 CB EA 27 49 63 E4 E9 6C 24 DA 0B 65 D9 58 D4 C2 08 0E E0 F9 0F 67 99 36 1E FC AE 33 14 68 5F 5C D9 12 5F C1 3A 32 3A 3B B5 49 B3 81 5D 14 08 D8 26 54 42 B2 68 FB E8 0C 32 04 BD 81 20 85 4F 10 AD 5A 1A 60 23 CC FB 46 DE 08 C6 F8 7E F7 95 E5 6E D3 6B 66 11 F6 C9 40 18 8D 91 D6 6A 9B 2D 27 16 FE 16 23 64 80 FC 44 27 2F BE 31 65 D4 21 96 3A 06 25 16 0E 7E F5 47 75 EE 9B BA 05 64 C3 02 05 D7 F2 71 E2 52 34 9D 53 62 D0 4B EC 83 EB FD F7 65 79 7E 84 71 7D 15 48 4E 0A 46 7C D6 3A 30 20 77 B5 F2 34 E8 12 FC 31 78 7D DA 37 C6 9F 06 28 BC AE A6 B1 FB 40 4F E2 85 CE 25 B7 C5 E5 35 0E 43 A9 C4 46 E2 45 E6 13 4B 4C D3 02 FA	
93	Signed Static Application Data	7F 96 00 BC C0 93 25 4F A0 BB 98 15 55 45 4D 02 19 73 D1 5C 77 8A 36 29 65 4D 1F 5C EF 33 B5 64 95 7F 8D 70 17 67 2D 15 31 18 89 B9 2E 89 10 A6 F5 86 8F B2 6B 5F D5 EF 45 90 69 EF F8 6E 2D 10 BF EE F0 61 5E F4 13 61 A0 F5 AE 61 72 4B 78 19 79 BB 5A C4 E4 93 DF DA 33 7C 7D CC 03 80 1B 09 C8 4A 3E F7 DF A0 1A AB 02 A1 44 0D A8 55 9E 84 03 08 C7 66 10 8F FE 11 84 77 35 0E 51 09 12 24 4E 03 1D DF 0D 27 57 A3 E0 9E 5F 3C 49 EF 4F 3E	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 9C A8 00	
9F 0E	Issuer Action Code - Denial	00 10 00 00 00	
9F 0F	Issuer Action Code - Online	D8 68 9C F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	

Tag	Element name	Data	Card v9.1 / v1.0
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 02 06 5F 2A 02	
9F 42	Application Currency Code	01 56 - CNY	
9F 46	ICC Public Key Certificate	AA 1C 39 30 A0 3C 84 4C 10 32 47 35 9A 6E 30 C1 B3 45 81 82 F5 EE 8D C9 BE D9 80 F2 7B BC 8B 1C 38 FE 73 8B 6C 6F EC D6 DB 56 03 5C 44 51 FE B6 3B 17 BB 00 11 73 0B 4C E8 B8 7D 0A 46 19 23 10 B3 97 5E 96 CF 3E 64 39 9F 8C 79 27 DE 63 1A 2E 8C 1E F9 87 BC CB 32 68 E4 37 E0 A2 18 0B 15 97 2E 9A 01 5B 9C 16 A2 CF C5 21 80 71 A5 A0 6B 1C 5B CA 65 B5 59 06 3B F0 84 AF 18 3D 73 6C A7 FB 0B 21 43 3F 1A 8D 1D A4 BB C5 25 05 70 46 28 B2	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	5C 02 C5 42 12 75 7A 44 97 6C 5D 6C 10 C2 18 19 49 9E 05 D5 9D 77 0A FA 82 0F	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4B	Signed Dynamic Application Data	43 76 88 AD 0C 07 B2 D1 D5 D1 1B 72 9C 04 57 20 1D A8 99 39 4F 1C 3D 7A BE 5C FE F3 84 62 D1 EA 03 2F 94 EB 43 83 65 A7 B6 92 29 4F ED 37 C6 22 B5 D4 02 BD 7A 1E 0E 48 06 D8 1A 5D 3E 07 69 4C 50 6A 7A AC C3 48 0D DB FB 7B 13 FA DE 89 D0 30 CD C2 C6 BA B6 F9 95 3D 9C 58 4A 80 1F 77 A3 92 0B 0E BA 9F CE 95 0A E0 11 CC DA CD 70 9A 20 68 03 54 CA 43 C1 7C 26 84 F1 F8 31 BE 5F 65 93 1D	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.1.7 Contactless: Application Tag data, AID A00000333010102, qPBOC online

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 18 D3 01 02 01 00 00 00 00 00 0F	
5F 20	Cardholder Name	20 2F - '/'	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 02	
87	Application Priority Indicator	01	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 6C	Card Transaction Qualifiers [UICS]	00 00	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.1.8 Contactless: Application Tag data, AID A00000333010102, qPBOC offline

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 18 D3 01 02 01 00 00 00 00 00 0F	
5F 20	Cardholder Name	20 2F - '/'	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 02	
87	Application Priority Indicator	01	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	00	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 6C	Card Transaction Qualifiers [UICS]	00 00	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.1.9 Contactless: CVM List - AID A00000333010102, Debit/Credit

Cardholder Verification Method List ('4203 1E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.1.10 Contactless: Application Tag data, AID A00000333010102

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 18 D3 01 02 01 00 00 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 71 99 99 00 00 00 18	
5F 20	Cardholder Name	20 2F - ' /'	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 02	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 42 03 1E 03 1F 00	
8F	Certification Authority Public Key Index	0B	

Tag	Element name	Data	Card v9.1 / v1.0
90	Issuer Public Key Certificate	56 77 7D D7 50 F1 59 81 7E 9F 33 35 60 5B 07 18 A5 6C 98 3C CB 5D 2E 28 6E 8E 72 24 C7 76 06 36 D5 80 A1 9A C1 98 D5 30 46 B4 CB EA 27 49 63 E4 E9 6C 24 DA 0B 65 D9 58 D4 C2 08 0E E0 F9 0F 67 99 36 1E FC AE 33 14 68 5F 5C D9 12 5F C1 3A 32 3A 3B B5 49 B3 81 5D 14 08 D8 26 54 42 B2 68 FB E8 0C 32 04 BD 81 20 85 4F 10 AD 5A 1A 60 23 CC FB 46 DE 08 C6 F8 7E F7 95 E5 6E D3 6B 66 11 F6 C9 40 18 8D 91 D6 6A 9B 2D 27 16 FE 16 23 64 80 FC 44 27 2F BE 31 65 D4 21 96 3A 06 25 16 0E 7E F5 47 75 EE 9B BA 05 64 C3 02 05 D7 F2 71 E2 52 34 9D 53 62 D0 4B EC 83 EB FD F7 65 79 7E 84 71 7D 15 48 4E 0A 46 7C D6 3A 30 20 77 B5 F2 34 E8 12 FC 31 78 7D DA 37 C6 9F 06 28 BC AE A6 B1 FB 40 4F E2 85 CE 25 B7 C5 E5 35 0E 43 A9 C4 46 E2 45 E6 13 4B 4C D3 02 FA	
93	Signed Static Application Data	7F 96 00 BC C0 93 25 4F A0 BB 98 15 55 45 4D 02 19 73 D1 5C 77 8A 36 29 65 4D 1F 5C EF 33 B5 64 95 7F 8D 70 17 67 2D 15 31 18 89 B9 2E 89 10 A6 F5 86 8F B2 6B 5F D5 EF 45 90 69 EF F8 6E 2D 10 BF EE F0 61 5E F4 13 61 A0 F5 AE 61 72 4B 78 19 79 BB 5A C4 E4 93 DF DA 33 7C 7D CC 03 80 1B 09 C8 4A 3E F7 DF A0 1A AB 02 A1 44 0D A8 55 9E 84 03 08 C7 66 10 8F FE 11 84 77 35 0E 51 09 12 24 4E 03 1D DF 0D 27 57 A3 E0 9E 5F 3C 49 EF 4F 3E	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 9C A8 00	
9F 0E	Issuer Action Code - Denial	00 10 00 00 00	
9F 0F	Issuer Action Code - Online	D8 68 9C F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 43 72 65 64 69 74 - 'UnionPay Credit'	

Tag	Element name	Data	Card v9.1 / v1.0
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
9F 42	Application Currency Code	01 56 - CNY	
9F 46	ICC Public Key Certificate	AA 1C 39 30 A0 3C 84 4C 10 32 47 35 9A 6E 30 C1 B3 45 81 82 F5 EE 8D C9 BE D9 80 F2 7B BC 8B 1C 38 FE 73 8B 6C 6F EC D6 DB 56 03 5C 44 51 FE B6 3B 17 BB 00 11 73 0B 4C E8 B8 7D 0A 46 19 23 10 B3 97 5E 96 CF 3E 64 39 9F 8C 79 27 DE 63 1A 2E 8C 1E F9 87 BC CB 32 68 E4 37 E0 A2 18 0B 15 97 2E 9A 01 5B 9C 16 A2 CF C5 21 80 71 A5 A0 6B 1C 5B CA 65 B5 59 06 3B F0 84 AF 18 3D 73 6C A7 FB 0B 21 43 3F 1A 8D 1D A4 BB C5 25 05 70 46 28 B2	
9F 47	ICC Public Key Exponent	03	
9F 48	ICC Public Key Remainder	5C 02 C5 42 12 75 7A 44 97 6C 5D 6C 10 C2 18 19 49 9E 05 D5 9D 77 0A FA 82 0F	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4B	Signed Dynamic Application Data	3E D5 56 C6 4D 11 95 06 DC 3D C8 16 84 4F BA E3 C1 2B 92 EA 97 2D 76 94 04 10 6E C0 9B 3C 88 FF 6A 7B 72 CB 8E 49 3E 60 14 1B AF AD 01 4B 74 30 30 94 CA 96 AD 4C 52 29 C0 A0 B2 47 CE B9 6B B3 A5 B0 2A 4C F3 5B 42 9E 00 2F 53 40 12 90 F5 BF 50 9F F4 E6 65 7B EC 87 FE 89 97 9A 4A 5B 2D 35 D5 DE 13 60 9E 4B F1 43 F0 5B AB EB 2F 2E EF 2F F9 3B 87 DC E2 D4 71 4A A3 10 DA AB 8C 68 5A 39	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.2 Test Card FT28 / QPC21 - UnionPay, DI, 1-AID, English, CHN, CNY

A Dual Interface, single-AID(UnionPay) credit card with an Issuer Country Code of 'China' and Currency Code of 'CNY'. Languages supported are Chinese and English.

The recommended transaction amount to generate a host approval is \$10.00.

1.2.1 Contact: CVM List - AID A000000333010103, EMV, 1st GAC ARQC

Cardholder Verification Method List ('4203 1E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.2.2 Contact: Application Tag data, AID A000000333010103

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 00 02 1D 30 10 20 10 00 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 71 99 99 00 00 00 00 02 1F	
5F 20	Cardholder Name	20 2F - '/'	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 03	
87	Application Priority Indicator	01	

Tag	Element name	Data	Card v9.1 / v1.0
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 1E 03 02 03 1F 00	
8F	Certification Authority Public Key Index	0B	
90	Issuer Public Key Certificate	26 B5 3D DF 98 18 D5 04 B1 96 79 84 BD CE E7 5B CF EF 56 59 CA 1D 44 22 53 F3 50 33 1D 95 79 FD 43 6B 68 87 B5 F6 69 CE 08 4D 29 F5 CD 62 68 B2 55 35 52 2F FD 61 69 22 3C 1B E3 C1 EE A8 7A F4 A2 93 86 DD 8E F2 18 DE E7 BB 77 0E 1C B9 F4 FF 08 DB 30 7B A1 1D 73 19 ED 61 47 82 C1 21 50 20 26 7F 83 DC 65 72 A6 F9 D7 2B 01 AF 30 2A AE 3F E7 0F 7C 99 D3 70 7B 8C DD DC AD 37 62 5F 13 84 71 0A 11 61 4C A3 F0 1D F4 C2 3F 2C 58 95 EB 47 FD 3D 6B 4D A1 47 49 A6 1A F9 0F 22 F9 35 58 14 BC 49 48 05 3B A0 60 AC 9C 08 07 97 D1 32 6A F9 6F 9C 35 98 E0 42 E9 73 01 9A 17 50 82 19 0A D7 66 98 B4 33 71 D4 F9 5C 37 01 9C 74 78 F4 07 57 69 C0 50 FB 81 EE 97 A2 EE DC 40 54 36 85 61 A6 21 0D 56 D4 FD 3E 29 69 01 E8 74 1E EA 03 AA 68 D3 3F 49 98 66 86 1C D6	
93	Signed Static Application Data	B2 C6 C2 05 59 38 5B 77 1C 0A 08 EE 11 D7 26 8F 98 F3 90 8A 4E 7A 01 6B FD 68 6E 1B EB 56 4F AA 3A 83 B4 0F 3B 98 AE CE 6C 3D 74 07 C1 8E FE A1 8A 53 FE C0 70 A6 10 36 90 19 CE 55 57 89 07 F9 62 D5 5B 1D 6B A3 EF 5E 33 9A 64 0E 65 A5 50 FC 4F 33 4F EE CB EB 7D D6 AE 56 3B DA 2C 32 B1 F1 C8 44 38 11 5F 87 B5 28 54 3A A7 AB EC 85 A0 CB 2B AA 6A B9 C3 22 D8 DC 29 E2 8C FB D4 C4 85 34 16 5E 26 30 F4 0F 95 CC 35 3E E3 BD 0E 02 56 F6 83 8B 96 41 98 B6 AA D9 82 7F 0E DA 4E 34 BA 8A 05 4E AF B1 09 5C 84 D7 A2 8B 55 86 BB B6 99 1D	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 04 A8 00	
9F 0E	Issuer Action Code - Denial	00 10 00 00 00	
9F 0F	Issuer Action Code - Online	D8 68 04 F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 02 06 5F 2A 02	
9F 42	Application Currency Code	01 56 - CNY	
9F 46	ICC Public Key Certificate	4A 9A 2A 30 5E 50 EF 16 99 A4 00 20 86 D7 E6 1B 7F B5 15 32 76 BF 77 83 D2 CA E2 A3 91 59 20 8A 16 71 8E 7B 2E 5D 38 A6 5C 17 66 6B 91 DF 4B C4 B6 CE E4 11 59 54 B8 E9 F6 FA 92 26 E5 41 C2 DE 4D 0F 5C D1 84 56 FE 12 51 41 3A 6F 0D 08 78 F1 A6 D9 AC 00 7C 3F 6C F6 24 A9 DA 03 34 9D 07 35 5A 6B 01 DA 16 E3 3E 84 00 DC D1 72 D8 45 A5 2A FD BD 79 B6 1E 1E FA 33 93 58 A5 0B C0 2A 7A B5 D0 4B 11 E8 F1 7D 13 54 40 C7 A5 B9 E8 08 74 D9 E6 A5 95 0C 91 CE 9F 4B C8 A7 67 D1 E8 BF E0 3C 05 97 AB 07 61 4A 94 BA 98 1D 4C 8C CD 93 40 6D	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	

Tag	Element name	Data	Card v9.1 / v1.0
9F 4B	Signed Dynamic Application Data	B7 91 A5 34 37 FF 63 06 F9 92 E3 F4 94 C8 AD 33 B0 20 64 CB FC 95 8A 72 16 78 E4 B5 82 53 62 89 2C C6 DC B2 21 15 C8 29 A0 96 66 33 E7 78 79 5E 33 ED 22 9C 28 D9 14 B5 54 97 47 4F E1 6C AD 7A 03 3E 5F 9E D4 DD 35 E3 5C E2 87 3E 1C D0 94 B7 9D 13 CA 8B 68 D3 14 4C 13 97 A4 34 1F 60 74 77 C2 97 AD 38 27 80 B9 CD DC 6D 96 F1 F3 7E 93 75 62 B3 4A 62 15 FF 48 8D 8E 71 0A 35 5E C8 ED BA	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 10 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.2.3 Contact: CVM List - AID A00000333010103, Low-Value

Cardholder Verification Method List ('4203 1E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.2.4 Contact: Application Tag data, AID A00000333010103

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 00 02 1D 30 10 20 10 00 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 71 99 99 00 00 00 00 02 1F	
5F 20	Cardholder Name	20 2F - ' /	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	

Tag	Element name	Data	Card v9.1 / v1.0
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 03	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 1E 03 02 03 1F 00	
8F	Certification Authority Public Key Index	0B	
90	Issuer Public Key Certificate	26 B5 3D DF 98 18 D5 04 B1 96 79 84 BD CE E7 5B CF EF 56 59 CA 1D 44 22 53 F3 50 33 1D 95 79 FD 43 6B 68 87 B5 F6 69 CE 08 4D 29 F5 CD 62 68 B2 55 35 52 2F FD 61 69 22 3C 1B E3 C1 EE A8 7A F4 A2 93 86 DD 8E F2 18 DE E7 BB 77 0E 1C B9 F4 FF 08 DB 30 7B A1 1D 73 19 ED 61 47 82 C1 21 50 20 26 7F 83 DC 65 72 A6 F9 D7 2B 01 AF 30 2A AE 3F E7 0F 7C 99 D3 70 7B 8C DD DC AD 37 62 5F 13 84 71 0A 11 61 4C A3 F0 1D F4 C2 3F 2C 58 95 EB 47 FD 3D 6B 4D A1 47 49 A6 1A F9 0F 22 F9 35 58 14 BC 49 48 05 3B A0 60 AC 9C 08 07 97 D1 32 6A F9 6F 9C 35 98 E0 42 E9 73 01 9A 17 50 82 19 0A D7 66 98 B4 33 71 D4 F9 5C 37 01 9C 74 78 F4 07 57 69 C0 50 FB 81 EE 97 A2 EE DC 40 54 36 85 61 A6 21 0D 56 D4 FD 3E 29 69 01 E8 74 1E EA 03 AA 68 D3 3F 49 98 66 86 1C D6	

Tag	Element name	Data	Card v9.1 / v1.0
93	Signed Static Application Data	B2 C6 C2 05 59 38 5B 77 1C 0A 08 EE 11 D7 26 8F 98 F3 90 8A 4E 7A 01 6B FD 68 6E 1B EB 56 4F AA 3A 83 B4 0F 3B 98 AE CE 6C 3D 74 07 C1 8E FE A1 8A 53 FE C0 70 A6 10 36 90 19 CE 55 57 89 07 F9 62 D5 5B 1D 6B A3 EF 5E 33 9A 64 0E 65 A5 50 FC 4F 33 4F EE CB EB 7D D6 AE 56 3B DA 2C 32 B1 F1 C8 44 38 11 5F 87 B5 28 54 3A A7 AB EC 85 A0 CB 2B AA 6A B9 C3 22 D8 DC 29 E2 8C FB D4 C4 85 34 16 5E 26 30 F4 0F 95 CC 35 3E E3 BD 0E 02 56 F6 83 8B 96 41 98 B6 AA D9 82 7F 0E DA 4E 34 BA 8A 05 4E AF B1 09 5C 84 D7 A2 8B 55 86 BB B6 99 1D	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 04 A8 00	
9F 0E	Issuer Action Code - Denial	00 10 00 00 00	
9F 0F	Issuer Action Code - Online	D8 68 04 F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 02 06 5F 2A 02	
9F 42	Application Currency Code	01 56 - CNY	

Tag	Element name	Data	Card v9.1 / v1.0
9F 46	ICC Public Key Certificate	4A 9A 2A 30 5E 50 EF 16 99 A4 00 20 86 D7 E6 1B 7F B5 15 32 76 BF 77 83 D2 CA E2 A3 91 59 20 8A 16 71 8E 7B 2E 5D 38 A6 5C 17 66 6B 91 DF 4B C4 B6 CE E4 11 59 54 B8 E9 F6 FA 92 26 E5 41 C2 DE 4D 0F 5C D1 84 56 FE 12 51 41 3A 6F 0D 08 78 F1 A6 D9 AC 00 7C 3F 6C F6 24 A9 DA 03 34 9D 07 35 5A 6B 01 DA 16 E3 3E 84 00 DC D1 72 D8 45 A5 2A FD BD 79 B6 1E 1E FA 33 93 58 A5 0B C0 2A 7A B5 D0 4B 11 E8 F1 7D 13 54 40 C7 A5 B9 E8 08 74 D9 E6 A5 95 0C 91 CE 9F 4B C8 A7 67 D1 E8 BF E0 3C 05 97 AB 07 61 4A 94 BA 98 1D 4C 8C CD 93 40 6D	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4B	Signed Dynamic Application Data	51 E8 0C 58 41 04 3E EC DE 09 E6 04 09 CC 42 B0 A8 3E 6A 31 74 33 DE A4 C3 7C C4 F2 71 95 22 75 CA 11 E3 7C 24 37 2F 10 E9 B6 4B D5 F0 95 1D A2 3F 6D 3D 88 D0 A7 E5 7F CA 3B A7 76 26 90 93 49 19 3D A6 92 E6 F8 FC 68 D1 9E 99 1C E7 2D 01 87 C1 10 F8 D6 3F F4 2B D5 60 D3 A4 99 12 EC D7 3D 14 DD D2 1B 90 86 B0 10 3E BC DC 2B 48 A4 69 8C A3 17 81 BC D7 96 64 A9 A6 79 17 6D DC 7F 5D EA	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 10 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.2.5 Contact: CVM List - AID A00000333010103, Dual-Currency, Low Value

Cardholder Verification Method List ('4203 1E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.2.6 Contact: Application Tag data, AID A00000333010103

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 02 1D 30 10 20 10 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 71 99 99 00 00 00 02 1F	
5F 20	Cardholder Name	20 2F - ' /'	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 03	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 1E 03 02 03 1F 00	
8F	Certification Authority Public Key Index	0B	

Tag	Element name	Data	Card v9.1 / v1.0
90	Issuer Public Key Certificate	26 B5 3D DF 98 18 D5 04 B1 96 79 84 BD CE E7 5B CF EF 56 59 CA 1D 44 22 53 F3 50 33 1D 95 79 FD 43 6B 68 87 B5 F6 69 CE 08 4D 29 F5 CD 62 68 B2 55 35 52 2F FD 61 69 22 3C 1B E3 C1 EE A8 7A F4 A2 93 86 DD 8E F2 18 DE E7 BB 77 0E 1C B9 F4 FF 08 DB 30 7B A1 1D 73 19 ED 61 47 82 C1 21 50 20 26 7F 83 DC 65 72 A6 F9 D7 2B 01 AF 30 2A AE 3F E7 0F 7C 99 D3 70 7B 8C DD DC AD 37 62 5F 13 84 71 0A 11 61 4C A3 F0 1D F4 C2 3F 2C 58 95 EB 47 FD 3D 6B 4D A1 47 49 A6 1A F9 0F 22 F9 35 58 14 BC 49 48 05 3B A0 60 AC 9C 08 07 97 D1 32 6A F9 6F 9C 35 98 E0 42 E9 73 01 9A 17 50 82 19 0A D7 66 98 B4 33 71 D4 F9 5C 37 01 9C 74 78 F4 07 57 69 C0 50 FB 81 EE 97 A2 EE DC 40 54 36 85 61 A6 21 0D 56 D4 FD 3E 29 69 01 E8 74 1E EA 03 AA 68 D3 3F 49 98 66 86 1C D6	
93	Signed Static Application Data	B2 C6 C2 05 59 38 5B 77 1C 0A 08 EE 11 D7 26 8F 98 F3 90 8A 4E 7A 01 6B FD 68 6E 1B EB 56 4F AA 3A 83 B4 0F 3B 98 AE CE 6C 3D 74 07 C1 8E FE A1 8A 53 FE C0 70 A6 10 36 90 19 CE 55 57 89 07 F9 62 D5 5B 1D 6B A3 EF 5E 33 9A 64 0E 65 A5 50 FC 4F 33 4F EE CB EB 7D D6 AE 56 3B DA 2C 32 B1 F1 C8 44 38 11 5F 87 B5 28 54 3A A7 AB EC 85 A0 CB 2B AA 6A B9 C3 22 D8 DC 29 E2 8C FB D4 C4 85 34 16 5E 26 30 F4 0F 95 CC 35 3E E3 BD 0E 02 56 F6 83 8B 96 41 98 B6 AA D9 82 7F 0E DA 4E 34 BA 8A 05 4E AF B1 09 5C 84 D7 A2 8B 55 86 BB B6 99 1D	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 04 A8 00	
9F 0E	Issuer Action Code - Denial	00 10 00 00 00	
9F 0F	Issuer Action Code - Online	D8 68 04 F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	

Tag	Element name	Data	Card v9.1 / v1.0
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 02 06 5F 2A 02	
9F 42	Application Currency Code	01 56 - CNY	
9F 46	ICC Public Key Certificate	4A 9A 2A 30 5E 50 EF 16 99 A4 00 20 86 D7 E6 1B 7F B5 15 32 76 BF 77 83 D2 CA E2 A3 91 59 20 8A 16 71 8E 7B 2E 5D 38 A6 5C 17 66 6B 91 DF 4B C4 B6 CE E4 11 59 54 B8 E9 F6 FA 92 26 E5 41 C2 DE 4D 0F 5C D1 84 56 FE 12 51 41 3A 6F 0D 08 78 F1 A6 D9 AC 00 7C 3F 6C F6 24 A9 DA 03 34 9D 07 35 5A 6B 01 DA 16 E3 3E 84 00 DC D1 72 D8 45 A5 2A FD BD 79 B6 1E 1E FA 33 93 58 A5 0B C0 2A 7A B5 D0 4B 11 E8 F1 7D 13 54 40 C7 A5 B9 E8 08 74 D9 E6 A5 95 0C 91 CE 9F 4B C8 A7 67 D1 E8 BF E0 3C 05 97 AB 07 61 4A 94 BA 98 1D 4C 8C CD 93 40 6D	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4B	Signed Dynamic Application Data	5E 44 C9 AF 87 DA 5E AC DD 06 9B 7F 6C 7A 5B 38 79 B5 C1 89 5B 22 69 F2 C8 2B 0F AF CC 10 DC B1 8A AA C9 41 50 BE 18 23 B9 C4 7C 4A B3 BA 2B 39 D8 34 98 EF 3F 4F D3 11 7F 8E 56 79 C2 C4 66 44 95 03 82 D1 8F 05 7E 4C AE EB F1 CD BB 03 41 52 CE EA FE 6D CD 63 C9 1C F0 72 3C 61 5C 74 3E 19 1D 03 3A 48 DB 9B 0E 89 65 39 79 AC E4 EC 85 F7 2F 16 DD DC 95 63 AE 7C 58 7B 8C 9C FA E4 5F 4D	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 10 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.2.7 Contactless: Application Tag data, AID A00000333010103, qPBOC online

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 00 02 1D 30 10 20 10 00 00 00 00 0F	
5F 20	Cardholder Name	20 2F - '/'	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 03	
87	Application Priority Indicator	01	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 10 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 6C	Card Transaction Qualifiers [UICS]	00 00	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.2.8 Contactless: Application Tag data, AID A00000333010103, qPBOC offline

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 00 02 1D 30 10 20 10 00 00 00 00 0F	
5F 20	Cardholder Name	20 2F - ' /'	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 03	
87	Application Priority Indicator	01	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	00	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	

Tag	Element name	Data	Card v9.1 / v1.0
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	c0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 10 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 6C	Card Transaction Qualifiers [UICS]	00 00	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.2.9 Contactless: CVM List - AID A00000333010103, Debit/Credit

Cardholder Verification Method List ('4203 1E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.2.10 Contactless: Application Tag data, AID A00000333010102

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
57	Track 2 Equivalent Data	81 71 99 99 00 00 00 00 02 1D 30 10 20 10 00 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 71 99 99 00 00 00 00 02 1F	
5F 20	Cardholder Name	20 2F - '/'	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 03	

Tag	Element name	Data	Card v9.1 / v1.0
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 1E 03 02 03 1F 00	
8F	Certification Authority Public Key Index	0B	
90	Issuer Public Key Certificate	26 B5 3D DF 98 18 D5 04 B1 96 79 84 BD CE E7 5B CF EF 56 59 CA 1D 44 22 53 F3 50 33 1D 95 79 FD 43 6B 68 87 B5 F6 69 CE 08 4D 29 F5 CD 62 68 B2 55 35 52 2F FD 61 69 22 3C 1B E3 C1 EE A8 7A F4 A2 93 86 DD 8E F2 18 DE E7 BB 77 0E 1C B9 F4 FF 08 DB 30 7B A1 1D 73 19 ED 61 47 82 C1 21 50 20 26 7F 83 DC 65 72 A6 F9 D7 2B 01 AF 30 2A AE 3F E7 0F 7C 99 D3 70 7B 8C DD DC AD 37 62 5F 13 84 71 0A 11 61 4C A3 F0 1D F4 C2 3F 2C 58 95 EB 47 FD 3D 6B 4D A1 47 49 A6 1A F9 0F 22 F9 35 58 14 BC 49 48 05 3B A0 60 AC 9C 08 07 97 D1 32 6A F9 6F 9C 35 98 E0 42 E9 73 01 9A 17 50 82 19 0A D7 66 98 B4 33 71 D4 F9 5C 37 01 9C 74 78 F4 07 57 69 C0 50 FB 81 EE 97 A2 EE DC 40 54 36 85 61 A6 21 0D 56 D4 FD 3E 29 69 01 E8 74 1E EA 03 AA 68 D3 3F 49 98 66 86 1C D6	
93	Signed Static Application Data	B2 C6 C2 05 59 38 5B 77 1C 0A 08 EE 11 D7 26 8F 98 F3 90 8A 4E 7A 01 6B FD 68 6E 1B EB 56 4F AA 3A 83 B4 0F 3B 98 AE CE 6C 3D 74 07 C1 8E FE A1 8A 53 FE C0 70 A6 10 36 90 19 CE 55 57 89 07 F9 62 D5 5B 1D 6B A3 EF 5E 33 9A 64 0E 65 A5 50 FC 4F 33 4F EE CB EB 7D D6 AE 56 3B DA 2C 32 B1 F1 C8 44 38 11 5F 87 B5 28 54 3A A7 AB EC 85 A0 CB 2B AA 6A B9 C3 22 D8 DC 29 E2 8C FB D4 C4 85 34 16 5E 26 30 F4 0F 95 CC 35 3E E3 BD 0E 02 56 F6 83 8B 96 41 98 B6 AA D9 82 7F 0E DA 4E 34 BA 8A 05 4E AF B1 09 5C 84 D7 A2 8B 55 86 BB B6 99 1D	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 04 A8 00	
9F 0E	Issuer Action Code - Denial	00 10 00 00 00	
9F 0F	Issuer Action Code - Online	D8 68 04 F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 49 43 53 20 51 55 53 49 43 52 45 44 49 54 - 'UICS QUSICREDIT'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
9F 42	Application Currency Code	01 56 - CNY	
9F 46	ICC Public Key Certificate	4A 9A 2A 30 5E 50 EF 16 99 A4 00 20 86 D7 E6 1B 7F B5 15 32 76 BF 77 83 D2 CA E2 A3 91 59 20 8A 16 71 8E 7B 2E 5D 38 A6 5C 17 66 6B 91 DF 4B C4 B6 CE E4 11 59 54 B8 E9 F6 FA 92 26 E5 41 C2 DE 4D 0F 5C D1 84 56 FE 12 51 41 3A 6F 0D 08 78 F1 A6 D9 AC 00 7C 3F 6C F6 24 A9 DA 03 34 9D 07 35 5A 6B 01 DA 16 E3 3E 84 00 DC D1 72 D8 45 A5 2A FD BD 79 B6 1E 1E FA 33 93 58 A5 0B C0 2A 7A B5 D0 4B 11 E8 F1 7D 13 54 40 C7 A5 B9 E8 08 74 D9 E6 A5 95 0C 91 CE 9F 4B C8 A7 67 D1 E8 BF E0 3C 05 97 AB 07 61 4A 94 BA 98 1D 4C 8C CD 93 40 6D	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	

Tag	Element name	Data	Card v9.1 / v1.0
9F 4B	Signed Dynamic Application Data	6A 57 D6 8D D4 8A 8F 27 70 6A F2 12 D4 18 A2 E0 9E 47 94 BC F1 24 06 53 C3 BB BB 1D 0C A7 4A 7E 52 62 B5 53 EA AF 4E 01 AC 1F 7D 9D FC 53 96 11 13 5C 9B B4 29 0B 75 9B B5 B9 18 5F 83 EC 14 85 E0 15 7C 75 6E A4 F2 7B B0 E4 54 A7 47 4A 8D AD C7 8A 6A 63 D4 84 E4 BA 3E 49 0E 64 2C BA 14 19 6A 1E F6 45 9E 40 F6 DA E7 1C 97 A7 64 52 70 04 64 5C 04 E9 35 86 93 66 8F FB 9D 66 07 49 0A 0D	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 10 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.3 Test Card FT29 / QPC22 - UnionPay, DI, 1-AID, Chinese, CHN, CNY

A Dual Interface, single-AID(UnionPay) credit card with an Issuer Country Code of 'China' and Currency Code of 'CNY'. Languages supported include Chinese.

The recommended transaction amount to generate a host approval is \$10.00.

1.3.1 Contact: CVM List - AID A00000333010101, EMV, 1st GAC ARQC

Cardholder Verification Method List ('4203 1E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.3.2 Contact: Application Tag data, AID A00000333010101

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	

Tag	Element name	Data	Card v9.1 / v1.0
57	Track 2 Equivalent Data	81 63 99 99 00 01 0D 30 10 20 10 00 00 00 00 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 63 99 99 00 01 0F	
5F 20	Cardholder Name	20 2F - ' /'	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 01	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 03 1F 00	
8F	Certification Authority Public Key Index	0B	
90	Issuer Public Key Certificate	17 F4 E4 CD D1 0B B0 62 6A 12 45 CD 5D 1F 44 CC 49 AD 84 E4 2D A1 6B F6 F2 35 BD EB DE C5 3D A6 E6 0E D9 2E DB B1 87 C1 9D A0 C7 12 34 9E 81 63 BE 10 C4 F1 56 61 BF 57 6D D3 4C 66 71 F1 A7 BC 7C E1 70 C7 27 7A 3A 07 6A 29 7D DF 83 7E 74 FD D3 88 07 B3 61 E4 4E 84 5E A3 BD 32 4F 7C F8 EB 10 3A 1E 20 69 4D 96 55 73 F9 38 43 43 8B 42 CD 2C 7B 50 10 39 FB FC B5 A4 CE 16 91 B1 AF C7 34 23 AD 25 61 7C 0D C4 73 CD 72 C5 AB 17 AD 95 F0 40 F5 57 66 F5 E9 70 2F C8 30 ED 89 0A C0 07 56 78 10 7F 41 5D 07 53 AD C8 32 66 D8 06 8A 17 61 8D 86 2F C8 73 A1 DB FA 7F F5 73 C3 EC C3 D0 51 17 24 87 2F 95 E5 91 DF E3 43 B2 69 02 B9 00 B4 55 66 61 51 EB E8 2A 39 51 EA 97 0C 9E 13 26 6B CF 04 C9 CD 55 CE BF C0 6A 00 0F 81 70 78 18 D2 CB 6A FD C5 35 E0 83 89	

Tag	Element name	Data	Card v9.1 / v1.0
93	Signed Static Application Data	61 E4 1E 5C E9 11 D7 9F AF D0 BD 8D F9 C9 61 D0 84 04 B7 9C 22 95 33 3A 35 5D 73 29 3A 94 C4 3F EA 6A E6 EA EB 2B C5 26 5C A1 1D 7E E6 52 08 E3 2A 61 A3 F8 3B 2B 95 51 29 6E 09 BF 38 E2 A3 8A 37 67 2B 42 07 79 52 1C 36 C8 BE 70 3B 0A 76 81 1B B7 42 87 33 D2 45 F5 DE D6 DC 17 72 62 46 08 DC 8D 67 F5 5D EA A8 D8 49 94 99 9B EC 9D A8 FB 77 93 D6 19 BF 0E 2B CC 02 BF 9F 17 F9 CF 32 2A D6 AC 7C 5F B2 DB A7 FC 22 B6 1F 02 C5 E2 82 95 27 12 63 0D 4A F1 42 58 38 11 C5 FA 42 4D 6B 6F EF 3A 81 9D E3 AE 57 3F 36 B8 58 E3 37 2C A4 EF	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 04 A8 00	
9F 0E	Issuer Action Code - Denial	00 10 98 00 00	
9F 0F	Issuer Action Code - Online	D8 68 04 F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 02 06 5F 2A 02	
9F 42	Application Currency Code	01 56 - CNY	

Tag	Element name	Data	Card v9.1 / v1.0
9F 46	ICC Public Key Certificate	63 11 4F 96 C4 05 FB 5F E9 B4 EB B1 32 FE A1 47 3A F1 45 4F 5C 77 F0 90 13 3C 5E C1 98 52 AC 5A 97 41 15 AA 4E 72 8D D1 A7 71 D1 23 B5 59 7D 7A 07 3D 8E 6B 1B 16 6D EB 3B 31 93 37 10 95 E0 A3 93 B2 2A 69 5E C9 8D F0 62 3D 7B 5A B3 31 CB 40 9F AD 58 09 82 AB 4F 47 C7 C4 75 89 20 53 43 34 16 77 8E 49 F5 88 7B AD A1 F3 0A 2F 61 C6 84 69 9C E1 95 09 D2 84 0E 26 E3 0C DA 87 7E 73 1B FE E1 C2 A8 0B F4 53 DE 70 53 37 6D 64 B6 15 F9 57 F1 80 31 B4 20 32 F9 13 BD C3 25 80 BF 8C FB CB BE 80 3B E5 A6 AF 93 36 15 1F 0A 52 61 2D BD A8	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4B	Signed Dynamic Application Data	38 C8 48 EF B6 EE A0 26 7F DD 43 F2 93 5A 95 74 87 13 D1 44 DC 3D 4F AE D9 E4 3B 7C A2 1E AA 93 0C A0 A0 9B E0 39 B5 C0 B0 9F D9 62 AA 03 11 80 3D B5 91 31 79 09 1C C6 BD F2 36 23 6A E1 7B 74 8D 4E 22 FD 75 DA 0F DA 00 14 73 A0 B6 C0 E5 28 F3 14 A1 22 AB 39 08 9C B9 C0 8A 9A 59 8B 5D 06 B9 A9 A4 A8 0F 6C 4B EE 22 92 0F 3E BB 4F 64 33 64 08 34 E9 16 8E C0 11 66 CF D7 CA 02 E5 EF 3E	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.3.3 Contact: CVM List - AID A00000333010101, Low-Value

Cardholder Verification Method List ('5E03 4203 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.3.4 Contact: Application Tag data, AID A00000333010101

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	
57	Track 2 Equivalent Data	81 63 99 99 00 01 0D 30 10 20 10 00 00 00 00 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 63 99 99 00 01 0F	
5F 20	Cardholder Name	20 2F - ' /'	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 01	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 03 1F 00	
8F	Certification Authority Public Key Index	0B	

Tag	Element name	Data	Card v9.1 / v1.0
90	Issuer Public Key Certificate	17 F4 E4 CD D1 0B B0 62 6A 12 45 CD 5D 1F 44 CC 49 AD 84 E4 2D A1 6B F6 F2 35 BD EB DE C5 3D A6 E6 0E D9 2E DB B1 87 C1 9D A0 C7 12 34 9E 81 63 BE 10 C4 F1 56 61 BF 57 6D D3 4C 66 71 F1 A7 BC 7C E1 70 C7 27 7A 3A 07 6A 29 7D DF 83 7E 74 FD D3 88 07 B3 61 E4 4E 84 5E A3 BD 32 4F 7C F8 EB 10 3A 1E 20 69 4D 96 55 73 F9 38 43 43 8B 42 CD 2C 7B 50 10 39 FB FC B5 A4 CE 16 91 B1 AF C7 34 23 AD 25 61 7C 0D C4 73 CD 72 C5 AB 17 AD 95 F0 40 F5 57 66 F5 E9 70 2F C8 30 ED 89 0A C0 07 56 78 10 7F 41 5D 07 53 AD C8 32 66 D8 06 8A 17 61 8D 86 2F C8 73 A1 DB FA 7F F5 73 C3 EC C3 D0 51 17 24 87 2F 95 E5 91 DF E3 43 B2 69 02 B9 00 B4 55 66 61 51 EB E8 2A 39 51 EA 97 0C 9E 13 26 6B CF 04 C9 CD 55 CE BF C0 6A 00 0F 81 70 78 18 D2 CB 6A FD C5 35 E0 83 89	
93	Signed Static Application Data	61 E4 1E 5C E9 11 D7 9F AF D0 BD 8D F9 C9 61 D0 84 04 B7 9C 22 95 33 3A 35 5D 73 29 3A 94 C4 3F EA 6A E6 EA EB 2B C5 26 5C A1 1D 7E E6 52 08 E3 2A 61 A3 F8 3B 2B 95 51 29 6E 09 BF 38 E2 A3 8A 37 67 2B 42 07 79 52 1C 36 C8 BE 70 3B 0A 76 81 1B B7 42 87 33 D2 45 F5 DE D6 DC 17 72 62 46 08 DC 8D 67 F5 5D EA A8 D8 49 94 99 9B EC 9D A8 FB 77 93 D6 19 BF 0E 2B CC 02 BF 9F 17 F9 CF 32 2A D6 AC 7C 5F B2 DB A7 FC 22 B6 1F 02 C5 E2 82 95 27 12 63 0D 4A F1 42 58 38 11 C5 FA 42 4D 6B 6F EF 3A 81 9D E3 AE 57 3F 36 B8 58 E3 37 2C A4 EF	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 04 A8 00	
9F 0E	Issuer Action Code - Denial	00 10 98 00 00	
9F 0F	Issuer Action Code - Online	D8 68 04 F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	

Tag	Element name	Data	Card v9.1 / v1.0
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 02 06 5F 2A 02	
9F 42	Application Currency Code	01 56 - CNY	
9F 46	ICC Public Key Certificate	63 11 4F 96 C4 05 FB 5F E9 B4 EB B1 32 FE A1 47 3A F1 45 4F 5C 77 F0 90 13 3C 5E C1 98 52 AC 5A 97 41 15 AA 4E 72 8D D1 A7 71 D1 23 B5 59 7D 7A 07 3D 8E 6B 1B 16 6D EB 3B 31 93 37 10 95 E0 A3 93 B2 2A 69 5E C9 8D F0 62 3D 7B 5A B3 31 CB 40 9F AD 58 09 82 AB 4F 47 C7 C4 75 89 20 53 43 34 16 77 8E 49 F5 88 7B AD A1 F3 0A 2F 61 C6 84 69 9C E1 95 09 D2 84 0E 26 E3 0C DA 87 7E 73 1B FE E1 C2 A8 0B F4 53 DE 70 53 37 6D 64 B6 15 F9 57 F1 80 31 B4 20 32 F9 13 BD C3 25 80 BF 8C FB CB BE 80 3B E5 A6 AF 93 36 15 1F 0A 52 61 2D BD A8	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4B	Signed Dynamic Application Data	98 16 B6 70 9F 79 13 A9 50 FE 03 5B 11 FA 4F F5 4A 4A 9B AD 99 6D EF 02 80 16 F6 0F 66 94 F0 99 89 D4 76 94 3D 1C C1 AF 9E 01 70 D9 94 90 F4 BF A4 A8 20 2F 7A C2 0A 52 4F F8 D7 19 5D F2 55 19 90 EB FA 18 B9 57 2B 81 77 97 22 B8 B1 5C BC CC EB F8 5F B4 5D 58 B9 CD 50 98 79 BE D8 FB 53 D7 96 6C 4B 9D C5 00 A6 26 8A F5 7E 2A 07 AD 93 A3 BC EA C2 4B 79 6C 46 CF AA C2 7E BD EF 80 FB 24	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.3.5 Contact: CVM List - AID A00000333010101, Dual-Currency, Low Value

Cardholder Verification Method List ('4203 1E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.3.6 Contact: Application Tag data, AID A00000333010101

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	
57	Track 2 Equivalent Data	81 63 99 99 00 01 0D 30 10 20 10 00 00 00 00 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 63 99 99 00 01 0F	
5F 20	Cardholder Name	20 2F - ' /'	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 01	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 03 1F 00	
8F	Certification Authority Public Key Index	0B	

Tag	Element name	Data	Card v9.1 / v1.0
90	Issuer Public Key Certificate	17 F4 E4 CD D1 0B B0 62 6A 12 45 CD 5D 1F 44 CC 49 AD 84 E4 2D A1 6B F6 F2 35 BD EB DE C5 3D A6 E6 0E D9 2E DB B1 87 C1 9D A0 C7 12 34 9E 81 63 BE 10 C4 F1 56 61 BF 57 6D D3 4C 66 71 F1 A7 BC 7C E1 70 C7 27 7A 3A 07 6A 29 7D DF 83 7E 74 FD D3 88 07 B3 61 E4 4E 84 5E A3 BD 32 4F 7C F8 EB 10 3A 1E 20 69 4D 96 55 73 F9 38 43 43 8B 42 CD 2C 7B 50 10 39 FB FC B5 A4 CE 16 91 B1 AF C7 34 23 AD 25 61 7C 0D C4 73 CD 72 C5 AB 17 AD 95 F0 40 F5 57 66 F5 E9 70 2F C8 30 ED 89 0A C0 07 56 78 10 7F 41 5D 07 53 AD C8 32 66 D8 06 8A 17 61 8D 86 2F C8 73 A1 DB FA 7F F5 73 C3 EC C3 D0 51 17 24 87 2F 95 E5 91 DF E3 43 B2 69 02 B9 00 B4 55 66 61 51 EB E8 2A 39 51 EA 97 0C 9E 13 26 6B CF 04 C9 CD 55 CE BF C0 6A 00 0F 81 70 78 18 D2 CB 6A FD C5 35 E0 83 89	
93	Signed Static Application Data	61 E4 1E 5C E9 11 D7 9F AF D0 BD 8D F9 C9 61 D0 84 04 B7 9C 22 95 33 3A 35 5D 73 29 3A 94 C4 3F EA 6A E6 EA EB 2B C5 26 5C A1 1D 7E E6 52 08 E3 2A 61 A3 F8 3B 2B 95 51 29 6E 09 BF 38 E2 A3 8A 37 67 2B 42 07 79 52 1C 36 C8 BE 70 3B 0A 76 81 1B B7 42 87 33 D2 45 F5 DE D6 DC 17 72 62 46 08 DC 8D 67 F5 5D EA A8 D8 49 94 99 9B EC 9D A8 FB 77 93 D6 19 BF 0E 2B CC 02 BF 9F 17 F9 CF 32 2A D6 AC 7C 5F B2 DB A7 FC 22 B6 1F 02 C5 E2 82 95 27 12 63 0D 4A F1 42 58 38 11 C5 FA 42 4D 6B 6F EF 3A 81 9D E3 AE 57 3F 36 B8 58 E3 37 2C A4 EF	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 04 A8 00	
9F 0E	Issuer Action Code - Denial	00 10 98 00 00	
9F 0F	Issuer Action Code - Online	D8 68 04 F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	

Tag	Element name	Data	Card v9.1 / v1.0
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 02 06 5F 2A 02	
9F 42	Application Currency Code	01 56 - CNY	
9F 46	ICC Public Key Certificate	63 11 4F 96 C4 05 FB 5F E9 B4 EB B1 32 FE A1 47 3A F1 45 4F 5C 77 F0 90 13 3C 5E C1 98 52 AC 5A 97 41 15 AA 4E 72 8D D1 A7 71 D1 23 B5 59 7D 7A 07 3D 8E 6B 1B 16 6D EB 3B 31 93 37 10 95 E0 A3 93 B2 2A 69 5E C9 8D F0 62 3D 7B 5A B3 31 CB 40 9F AD 58 09 82 AB 4F 47 C7 C4 75 89 20 53 43 34 16 77 8E 49 F5 88 7B AD A1 F3 0A 2F 61 C6 84 69 9C E1 95 09 D2 84 0E 26 E3 0C DA 87 7E 73 1B FE E1 C2 A8 0B F4 53 DE 70 53 37 6D 64 B6 15 F9 57 F1 80 31 B4 20 32 F9 13 BD C3 25 80 BF 8C FB CB BE 80 3B E5 A6 AF 93 36 15 1F 0A 52 61 2D BD A8	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4B	Signed Dynamic Application Data	27 1C 05 17 2D B3 4D 49 72 D8 A5 79 D6 EF 91 75 B4 1F 15 38 66 62 04 8E BF 4B 46 AF A8 F7 4A BD 62 79 94 05 9A B5 6A 08 D2 B3 6D 96 6D 11 38 38 36 41 AD C2 E3 55 D3 7A 19 CD 8A 5C E4 15 06 CA 7A 04 3F 06 0A A2 E9 4C 82 B8 3D F6 98 36 92 F9 A2 34 6E 9E D3 8D 55 90 69 B1 1A 46 AF 3A F4 25 22 A1 66 CF 05 92 4A 82 7D 2F B2 8B 70 9A 95 32 6E F8 4C 81 87 6F 50 07 05 94 DB 1B 1D 0A F6 4F	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.3.7 Contactless: Application Tag data, AID A00000333010101, qPBOC online

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	
57	Track 2 Equivalent Data	81 63 99 99 00 01 0D 30 10 20 10 00 00 00 00 00 00 00 0F	
5F 20	Cardholder Name	20 2F - '/'	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 01	
87	Application Priority Indicator	01	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 6C	Card Transaction Qualifiers [UICS]	00 00	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.3.8 Contactless: Application Tag data, AID A00000333010101, qPBOC offline

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 49 43 53 20 43 52 45 44 49 54 - 'UICS CREDIT'	
57	Track 2 Equivalent Data	62 10 94 68 88 05 3D 30 10 20 10 00 00 00 00 00 00 00 0F	
5F 20	Cardholder Name	20 2F - '/'	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00 BYTE 1: b7 - Offline SDA supported b6 - Offline DDA supported b5 - Cardholder verification supported b4 - Terminal risk mgmt to be performed b3 - Issuer authentication supported using External Authenticate command b1 - Combined DDA / GEN AC NOT supported BYTE 2: b8 - Mag-stripe mode NOT supported b7 - Is NOT Mobile phone	
x	xxxxxxxxxxxxxxxxxxxx		
50	Application Label	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	
57	Track 2 Equivalent Data	81 63 99 99 00 01 0D 30 10 20 10 00 00 00 00 00 00 00 0F	
5F 20	Cardholder Name	20 2F	
5F 2D	Language Preference	7A 68	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 01	
87	Application Priority Indicator	01	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	00	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
9F 4D	Transaction Log Entry	0B 0A	

Tag	Element name	Data	Card v9.1 / v1.0
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 6C	Card Transaction Qualifiers [UICS]	00 00	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.3.9 Contactless: CVM List - AID A00000333010101, Debit/Credit

Cardholder Verification Method List ('4203 1E03 1F00')			
CVM	Verification Method	Conditions	If unsuccessful
1	Online PIN	Terminal supports CVM type	Next CVM
2	Signature (paper)	Terminal supports CVM type	Fail
3	No CVM required	Always	Fail

1.3.10 Contactless: Application Tag data, AID A00000333010101

* Tag value changes with card usage

Tag	Element name	Data	Card v9.1 / v1.0
50	Application Label	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	
57	Track 2 Equivalent Data	81 63 99 99 00 01 0D 30 10 20 10 00 00 00 00 00 00 00 0F	
5A	Application Primary Account Number (PAN)	81 63 99 99 00 01 0F	
5F 20	Cardholder Name	20 2F - ' /'	
5F 24	Application Expiration Date	30 10 31	
5F 25	Application Effective Date	xx xx xx	
5F 28	Issuer Country Code	01 56 - CHN	
5F 2D	Language Preference	7A 68 - 'zh' (Chinese)	
5F 30	Service Code	02 01	
5F 34	Application PAN Sequence Number	01	
82	Application Interchange Profile [UICS]	7C 00	
84	Dedicated File (DF) Name	A0 00 00 03 33 01 01 01	
87	Application Priority Indicator	01	
8C	Card Risk Management Data Object List 1 (CDOL1)	9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03 9F 4E 14	
8D	Card Risk Management Data Object List 2 (CDOL2)	8A 02 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04 9F 21 03	
8E	Cardholder Verification Method (CVM) List	00 00 00 00 00 00 00 00 02 03 1F 00	
8F	Certification Authority Public Key Index	0B	

Tag	Element name	Data	Card v9.1 / v1.0
90	Issuer Public Key Certificate	17 F4 E4 CD D1 0B B0 62 6A 12 45 CD 5D 1F 44 CC 49 AD 84 E4 2D A1 6B F6 F2 35 BD EB DE C5 3D A6 E6 0E D9 2E DB B1 87 C1 9D A0 C7 12 34 9E 81 63 BE 10 C4 F1 56 61 BF 57 6D D3 4C 66 71 F1 A7 BC 7C E1 70 C7 27 7A 3A 07 6A 29 7D DF 83 7E 74 FD D3 88 07 B3 61 E4 4E 84 5E A3 BD 32 4F 7C F8 EB 10 3A 1E 20 69 4D 96 55 73 F9 38 43 43 8B 42 CD 2C 7B 50 10 39 FB FC B5 A4 CE 16 91 B1 AF C7 34 23 AD 25 61 7C 0D C4 73 CD 72 C5 AB 17 AD 95 F0 40 F5 57 66 F5 E9 70 2F C8 30 ED 89 0A C0 07 56 78 10 7F 41 5D 07 53 AD C8 32 66 D8 06 8A 17 61 8D 86 2F C8 73 A1 DB FA 7F F5 73 C3 EC C3 D0 51 17 24 87 2F 95 E5 91 DF E3 43 B2 69 02 B9 00 B4 55 66 61 51 EB E8 2A 39 51 EA 97 0C 9E 13 26 6B CF 04 C9 CD 55 CE BF C0 6A 00 0F 81 70 78 18 D2 CB 6A FD C5 35 E0 83 89	
93	Signed Static Application Data	61 E4 1E 5C E9 11 D7 9F AF D0 BD 8D F9 C9 61 D0 84 04 B7 9C 22 95 33 3A 35 5D 73 29 3A 94 C4 3F EA 6A E6 EA EB 2B C5 26 5C A1 1D 7E E6 52 08 E3 2A 61 A3 F8 3B 2B 95 51 29 6E 09 BF 38 E2 A3 8A 37 67 2B 42 07 79 52 1C 36 C8 BE 70 3B 0A 76 81 1B B7 42 87 33 D2 45 F5 DE D6 DC 17 72 62 46 08 DC 8D 67 F5 5D EA A8 D8 49 94 99 9B EC 9D A8 FB 77 93 D6 19 BF 0E 2B CC 02 BF 9F 17 F9 CF 32 2A D6 AC 7C 5F B2 DB A7 FC 22 B6 1F 02 C5 E2 82 95 27 12 63 0D 4A F1 42 58 38 11 C5 FA 42 4D 6B 6F EF 3A 81 9D E3 AE 57 3F 36 B8 58 E3 37 2C A4 EF	
94	Application File Locator (AFL)	08 01 02 00 10 01 06 01 20 01 02 00	
9F 07	Application Usage Control	FF 00 BYTE 1: b8 - Domestic cash trans. valid b7 - Int'l cash transactions valid b6 - Domestic goods valid b5 - International goods valid b4 - Domestic services valid b3 - International services valid b2 - ATMs valid b1 - non-ATM terminals valid BYTE 2: b8 - Domestic cashback NOT allowed b7 - International cashback NOT allowed	
9F 08	Application Version Number	00 30	
9F 0D	Issuer Action Code - Default	D8 60 04 A8 00	
9F 0E	Issuer Action Code - Denial	00 10 98 00 00	
9F 0F	Issuer Action Code - Online	D8 68 04 F8 00	
9F 10	Issuer Application Data [UICS]	xx xx 01 xx xx xx xx xx xx xx xx xx xx xx xx xx xx xx *	

Tag	Element name	Data	Card v9.1 / v1.0
9F 11	Issuer Code Table Index	01	
9F 12	Application Preferred Name	55 6E 69 6F 6E 50 61 79 20 44 65 62 69 74 - 'UnionPay Debit'	
9F 13	Last Online Application Transaction Counter (ATC) Register	xx xx *	
9F 14	Lower Consecutive Offline Limit	00	
9F 23	Upper Consecutive Offline Limit	00	
9F 26	Application Cryptogram (AC)	xx xx xx xx xx xx xx xx *	
9F 27	Cryptogram Information Data (CID)	80	
9F 32	Issuer Public Key Exponent	03	
9F 36	Application Transaction Counter (ATC)	xx xx *	
9F 38	Processing Options Data Object List (PDOL)	9F 66 04 9F 02 06 9F 03 06 9F 1A 02 95 05 5F 2A 02 9A 03 9C 01 9F 37 04	
9F 42	Application Currency Code	01 56 - CNY	
9F 46	ICC Public Key Certificate	63 11 4F 96 C4 05 FB 5F E9 B4 EB B1 32 FE A1 47 3A F1 45 4F 5C 77 F0 90 13 3C 5E C1 98 52 AC 5A 97 41 15 AA 4E 72 8D D1 A7 71 D1 23 B5 59 7D 7A 07 3D 8E 6B 1B 16 6D EB 3B 31 93 37 10 95 E0 A3 93 B2 2A 69 5E C9 8D F0 62 3D 7B 5A B3 31 CB 40 9F AD 58 09 82 AB 4F 47 C7 C4 75 89 20 53 43 34 16 77 8E 49 F5 88 7B AD A1 F3 0A 2F 61 C6 84 69 9C E1 95 09 D2 84 0E 26 E3 0C DA 87 7E 73 1B FE E1 C2 A8 0B F4 53 DE 70 53 37 6D 64 B6 15 F9 57 F1 80 31 B4 20 32 F9 13 BD C3 25 80 BF 8C FB CB BE 80 3B E5 A6 AF 93 36 15 1F 0A 52 61 2D BD A8	
9F 47	ICC Public Key Exponent	03	
9F 49	Dynamic Data Authentication Data Object List (DDOL)	9F 37 04	
9F 4A	Static Data Authentication Tag List	82	
9F 4B	Signed Dynamic Application Data	CD AC A1 83 9B 47 78 73 38 54 05 12 8F 50 DB 53 51 19 26 FD A2 52 45 56 26 BB 79 EB 98 03 78 2F 22 CB 3E EC 26 27 11 B3 7B 56 AB A8 1C 1E E9 3C EC D5 5C 5F F8 D5 5E F5 D2 68 D0 79 5F A2 0E F8 19 0B F1 68 F1 84 76 A4 4C A3 52 29 8A 13 16 91 95 58 43 8E AE 56 18 4B 33 AA 45 29 C8 3A F2 DA C9 D5 3A C4 56 14 94 1E 82 A4 0D 94 4F E7 D2 32 31 98 75 A9 0D D7 F2 F1 61 24 F1 02 04 58 9E AC	
9F 4D	Transaction Log Entry	0B 0A	
9F 4F	Transaction Log Format	9A 03 9F 21 03 9F 02 06 9F 03 06 9F 1A 02 5F 2A 02 9F 4E 14 9C 01 9F 36 02	
9F 51	Application Currency Code [UICS]	01 56 - CNY	
9F 52	Application Default Action [UICS]	C0 00	
9F 53	Consecutive Transaction Limit (International) [UICS]	00	
9F 54	Cumulative Total Transaction Amount Limit [UICS]	00 00 00 00 00 00	
9F 56	Issuer Authentication Indicator [UICS]	00	

Tag	Element name	Data	Card v9.1 / v1.0
9F 58	Lower Consecutive Offline Limit (Card Check) [UICS]	00	
9F 59	Upper Consecutive Offline Limit (Card Check) [UICS]	00	
9F 5D	Available Offline Spending Amount [UICS]	00 00 00 00 00 00	
9F 68	Card Additional Processes [UICS]	10 20 D0 20	
9F 6B	Card CVM Limit [UICS]	00 00 00 99 99 99	
9F 72	Consecutive Transaction Limit (International-Country) [UICS]	00	

1.4 Test Card B1 - UnionPay, Magstripe-Only, Fallback card

A magstripe Fallback card

The recommended transaction amount to generate a host approval is \$10.00.

1.5 Test Card B2 - UnionPay, Magstripe-Only, Fallback card

A magstripe Fallback card

The recommended transaction amount to generate a host approval is \$10.00.

1.6 Test Card B3 - UnionPay, Magstripe-Only, Fallback card

A magstripe Fallback card

The recommended transaction amount to generate a host approval is \$10.00.

Chapter 2 - ASCII Character Conversion Chart

Dec	Bin	Hex	Char	Dec	Bin	Hex	Char	Dec	Bin	Hex	Char
00	00000000	00	NUL	44	00101100	2C	,	88	01011000	58	X
01	00000001	01	SOH	45	00101101	2D	-	89	01011001	59	Y
02	00000010	02	STX	46	00101110	2E	.	90	01011010	5A	Z
03	00000011	03	ETX	47	00101111	2F	/	91	01011011	5B	[
04	00000100	04	EOT	48	00110000	30	0	92	01011100	5C	\
05	00000101	05	ENQ	49	00110001	31	1	93	01011101	5D]
06	00000110	06	ACK	50	00110010	32	2	94	01011110	5E	^
07	00000111	07	BEL	51	00110011	33	3	95	01011111	5F	_
08	00001000	08	BS	52	00110100	34	4	96	01100000	60	`
09	00001001	09	HT	53	00110101	35	5	97	01100001	61	a
10	00001010	0A	LF	54	00110110	36	6	98	01100010	62	b
11	00001011	0B	VT	55	00110111	37	7	99	01100011	63	c
12	00001100	0C	FF	56	00111000	38	8	100	01100100	64	d
13	00001101	0D	CR	57	00111001	39	9	101	01100101	65	e
14	00001110	0E	SO	58	00111010	3A	:	102	01100110	66	f
15	00001111	0F	SI	59	00111011	3B	;	103	01100111	67	g
16	00010000	10	DLE	60	00111100	3C	<	104	01101000	68	h
17	00010001	11	DC1	61	00111101	3D	=	105	01101001	69	i
18	00010010	12	DC2	62	00111110	3E	>	106	01101010	6A	j
19	00010011	13	DC3	63	00111111	3F	?	107	01101011	6B	k
20	00010100	14	DC4	64	01000000	40	@	108	01101100	6C	l
21	00010101	15	NAK	65	01000001	41	A	109	01101101	6D	m
22	00010110	16	SYM	66	01000010	42	B	110	01101110	6E	n
23	00010111	17	ETB	67	01000011	43	C	111	01101111	6F	o
24	00011000	18	CAN	68	01000100	44	D	112	01110000	70	p
25	00011001	19	EM	69	01000101	45	E	113	01110001	71	q
26	00011010	1A	SUB	70	01000110	46	F	114	01110010	72	r
27	00011011	1B	ESC	71	01000111	47	G	115	01110011	73	s
28	00011100	1C	FS	72	01001000	48	H	116	01110100	74	t
29	00011101	1D	GS	73	01001001	49	I	117	01110101	75	u
30	00011110	1E	RS	74	01001010	4A	J	118	01110110	76	v
31	00011111	1F	US	75	01001011	4B	K	119	01110111	77	w
32	00100000	20	SP	76	01001100	4C	L	120	01111000	78	x
33	00100001	21	!	77	01001101	4D	M	121	01111001	79	y
34	00100010	22	"	78	01001110	4E	N	122	01111010	7A	z
35	00100011	23	#	79	01001111	4F	O	123	01111011	7B	{
36	00100100	24	\$	80	01010000	50	P	124	01111100	7C	
37	00100101	25	%	81	01010001	51	Q	125	01111101	7D	}
38	00100110	26	&	82	01010010	52	R	126	01111110	7E	~
39	00100111	27	'	83	01010011	53	S	127	01111111	7F	DEL
40	00101000	28	(84	01010100	54	T				
41	00101001	29)	85	01010101	55	U				
42	00101010	2A	*	86	01010110	56	V				
43	00101011	2B	+	87	01010111	57	W				