

Online Processing Addendum

Technical Specification

Online Processing Versions 7.0 - 7.4 Revision 3.0
Addendum in Support of RevolutionCard
Rev. 2
March 30, 2009



Technical Specification

*Online Processing
Versions 7.0 – 7.4 Revision 3.0
Addendum in Support of RevolutionCard*

Rev. 2

03/30/2009



© Chase Paymentech Solutions, LLC 2009 – All rights reserved

4 Northeastern Boulevard
Salem, New Hampshire 03079-1952
603-896-6000
www.chasepaymentech.com

This document contains confidential and proprietary information of Chase Paymentech Solutions, LLC. No disclosure or duplication of any portion of these materials may be made without the express written consent of Chase Paymentech. These materials must be used solely for the operation of Chase Paymentech programs and for no other use.

The following updates, additions, corrections have been incorporated in
Online Processing Versions 7.0 – 7.4 Revision 3.0
Addendum In Support of RevolutionCard

Page No(s)	Action	Description of Change
Online Processing Detail Record – 03/25/2009		
2	Updated	Updated Merchant's Order Number field to include RevolutionCard note.
11	Updated	Updated Transaction Type field with note to explain transaction type mismatch.
Additional Request Processing Formats – 03/25/2009		
22	<u>Updated</u>	Added RevolutionCard information regarding AVS in Ship to Address Format Indicator.
Removed	<u>Updated</u>	Removed the Cash Back (CO) Reply Format Indicator.
APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE – 03/25/2009		
44	Updated	Updated Reason Response Code 253 for RevolutionCard
APPENDIX F: AUTHORIZATION REVERSALS		
69-71	Deletion	Removed references to RevolutionCard
71	Updated	Added Additional References
APPENDIX G: PARTIAL AUTHORIZATION – 03/25/2009		
87-88	Updated	Removed Current Balance references for RevolutionCard
APPENDIX AA: REVOLUTIONCARD – 03/25/2009		
95, 96	Updated	Added information to Card Present Transaction Matching Criteria tables.
98	Updated	Added information to Card Present Transaction Types for Purchase Authorization Reversal.
101	Updated	Added information to Card Present Transaction Types for Refund Authorization Reversal.
103	Updated	Added section Authorization Reversals: How it Works
106, 107	Updated	Added information to Card Not Present Transaction Matching Criteria tables.
108	Updated	Added One Time Token information for Authorization Transaction Type.
111	Updated	Added information to Card Not Present Transaction Types and Requirements for Authorization Reversal.
113	Updated	Added One Time Token information for Conditional Deposit Transaction Type.
115	Updated	Added Reply Format Indicator for RevolutionCard (RC) to Verification for Card Not Present transactions.
APPENDIX C: ERROR SCREENING – 02/20/2009		
66	Updated	Card Prefix Check section to change RevolutionCard BIN numbers to Unknown
Online Processing Detail Record – 02/03/2009		
2	Updated	Method of Payment (MOP) field to include RC (RevolutionCard).
4	Updated	Account Number field to include RevolutionCard in the MOD 10 note.

Continued on next page

The following updates, additions, corrections have been incorporated in
Online Processing Versions 7.0 – 7.4 Revision 3.0
Addendum In Support of RevolutionCard

Page No(s)	Action	Description of Change
4	Updated	Expiration Date field to include RevolutionCard note.
5-6	Updated	Amount field to add note regarding RevolutionCard's acceptance of \$0 Auths and that RevolutionCard has no minimum. Added RevolutionCard to the MOP/Authorization table. Added Account Verification (Action Code VF) note.
10	Updated	Transaction Type field to include RevolutionCard note. Also added Account Verification note to Transaction Type field.
11-12	Updated	Action Codes AR, AU, DR, PA, PR, and RA to reflect RevolutionCard.
12	Added	Action Code VF for Account Verification and assigned MOPs as MasterCard, MasterCard Diner, RevolutionCard, and Visa.
17	Added	Description of Action Code VF (Account Verification).
Additional Request Processing Formats – 02/03/2009		
18	Added	RevolutionCard Format Indicator to Additional Request Processing Formats table.
20	Updated	Ship to Address Format Indicator (AS) to include RevolutionCard note.
25-26	Added	RevolutionCard Format Indicator (RC)
27-29	Updated	Retail Format Indicator (RE) in the following ways: <ul style="list-style-type: none"> • Included RevolutionCard note in the Track Indicator field. • Updated Notes section.
30-32	Updated	Retail 3 Format Indicator (R3) in the following ways: <ul style="list-style-type: none"> • Included RevolutionCard note in the Track Indicator field. • Updated Notes section.
Online Processing Return Format Record – 02/03/2009		
33	Updated	Method of Payment (MOP) field to include RC (RevolutionCard).
Return Response Processing Formats – 02/03/2009		
35	Added	RevolutionCard Reply Format Indicator to Return Response Processing Formats table.
36	Included	Cash Back Reply Format Indicator (CO) in spec. No changes made.
37	Updated	Partial Authorization Format Indicator (PB) in the following ways: <ul style="list-style-type: none"> – Updated Current Balance field to include RevolutionCard section.
38	Added	RevolutionCard Format Indicator (RC).
APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE – 02/03/2009		
39	Updated	Appendix A key to include RevolutionCard as MOP.
40-54	Updated	Added RevolutionCard MOP (RC) to Response Reason Codes 104, 109, 225, 227, 264, 301, 303, 304, 305, 401, 501, 502, 522, 523, 524, 530, 591, 594, 599, 603, 606, 607, 740, 741, 813, 833, and 902.

Continued on next page

The following updates, additions, corrections have been incorporated in
Online Processing Versions 7.0 – 7.4 Revision 3.0
Addendum In Support of RevolutionCard

Page No(s)	Action	Description of Change
APPENDIX B: ADDRESS VERIFICATION – 02/03/2009		
56	Updated	Introduction to include RevolutionCard.
59	Updated	Address Verification Process section to include RevolutionCard note and explanation of Restricted vs. Unrestricted Cards.
60-61	Updated	<ul style="list-style-type: none"> • AVS Response Code list to remove asterisk (*) from ID, IE, IS, IA, IB, IC, IP, I4, I7, and I8 codes. Also removed note pertaining to asterisk (*). • Added new AVS response codes R3 and R8. • Added RevolutionCard specific note to Notes section.
62	Updated	Postal Code Format section to include RevolutionCard.
APPENDIX C: ERROR SCREENING – 02/03/2009		
66		Card Prefix Check section to include RevolutionCard BIN numbers.
67	Updated	Account Number Length Check section to include RevolutionCard account number length.
APPENDIX F: AUTHORIZATION REVERSALS – 02/03/2009		
68	Updated	Introduction to include reference to RevolutionCard appendix.
69	Updated	Transaction Types and Requirements to include RevolutionCard note.
70	Updated	Card Types/Supported Currencies section to include RevolutionCard.
91	Updated	Card Types/Supported Currencies section to include RevolutionCard.
APPENDIX AA: REVOLUTIONCARD – 02/03/2009		
92-110	Added	RevolutionCard Appendix.

TECHNICAL SPECIFICATION FOR ONLINE PROCESSING

Table of Contents

RECORD LAYOUTS	1
Online Processing Detail Record	1
Table 1: Action Code Definitions.....	15
Additional Request Processing Formats.....	20
Ship to Address Format Indicator	21
Cash Back Format Indicator	23
Partial Authorization Format Indicator.....	24
RevolutionCard Format Indicator	27
Retail Format Indicator.....	29
Retail 3 Format Indicator.....	32
Online Processing Return Format Record	35
Return Response Processing Formats	37
Partial Authorization Reply Format Indicator	38
RevolutionCard Reply Format Indicator	39
APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE.....	40
Chase Paymentech Response Reason Codes.....	40
Auth Code Responses	56
APPENDIX B: ADDRESS VERIFICATION	57
Introduction	57
Types of Address Records.....	57
Address Verification Process	58
AVS Response Codes	61
AVS Response Key	63
Postal Code Format.....	63
APPENDIX C: ERROR SCREENING	64
Bad Account Number Check.....	64
MOD 10 Check Digit	64
Card Prefix Check.....	67
Account Number Length Check	68
APPENDIX F: AUTHORIZATION REVERSALS	69
Introduction	69
How It Works.....	69
Transaction Types and Requirements	70
Additional References.....	71
Card Types / Supported Currencies	71
Response Reason Codes	71
To Get Started	71

TECHNICAL SPECIFICATION FOR ONLINE PROCESSING

Table of Contents

APPENDIX G: PARTIAL AUTHORIZATION	72
Introduction	72
How It Works.....	72
American Express.....	73
Transaction Types and Requirements	89
Card Types / Supported Currencies	92
Response Reason Codes	92
To Get Started	92
APPENDIX AA: REVOLUTIONCARD	93
Introduction	93
Card Present - How it Works	93
Card Present Transaction Types	94
Card Present Transaction Matching Criteria.....	95
Card Present Transaction Types and Requirements.....	97
Card Not Present – How it Works	103
Authorization Reversals: How It Works.....	103
Card Not Present Transaction Types.....	104
Card Not Present Transaction Matching Criteria	106
Card Not Present Transaction Types and Requirements	108
Card Types / Supported Currencies	116
Response Reason Codes	116
To Get Started	116

RECORD LAYOUTS

Online Processing Detail Record

Position	Length	Data Type	Field Name	Comments
5,26	22	A	Merchant's Order Number	<p>A value composed of any alpha, blank, digit or punctuation combination that will be returned in the transaction response. This field will tie the request on the merchants end to the response Chase Paymentech provides you.</p> <p>Required field/left justified/blank filled</p> <p>Notes: Chase Paymentech looks at the entire 22-byte order number; however, the number of bytes that should be unique are based on the association.</p> <p>For non-international transactions, MasterCard, MasterCard Diners, Visa and American Express (AMEX) utilize all 22 characters of this field. Discover conveyed transactions utilize the first 16 characters of this field.</p> <p>For international transactions, MasterCard, Visa, and Switch/Solo (UK Maestro) utilize the first thirteen characters of this field. AMEX utilizes the first 12 characters in this field.</p> <p>For international transactions, MasterCard, Visa, and Switch/Solo (UK Maestro) utilize the first thirteen characters of this field.</p> <p>MoneyPak utilizes the first 15 characters of this field.</p> <p>Merchants MUST pass the same order number on authorization, redemption and reversal transactions for MoneyPak.</p> <p>Merchants should pass the same order number on authorization, deposit, and refund transactions. The order number should also remain the same for any individual authorization or deposit transaction that must be re-sent.</p>

Continued on next page

**RECORD LAYOUTS
(Continued)**

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
			Merchant's Order Number, (Continued)	<p>Merchants MUST pass the same order number on authorization, redemption and reversal transactions for Gift Card.</p> <p>Debit transactions can only use upper and lower case alpha (A-Z, a-z) and numeric (0-9).</p> <p>RevolutionCard transactions cannot use an underscore (_).</p> <p>For non-international transactions, DO NOT USE the following characters: pipe (), caret (^), percent symbol (%), backslash (\), or forward slash (/).</p> <p>For international transactions, DO NOT USE the following characters: caret (^), backslash (\), open bracket ([), closed bracket (]), tilde (~), or accent key (`) or the transaction will reject with Response Reason Code 225 (Invalid Field Data).</p>

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
27,28	2	A	Method of Payment (MOP)	<p>This field defines the MOP associated with this transaction.</p> <p>Valid values:</p> <ul style="list-style-type: none"> AE – ACCEL PIN-Based Debit AF – AFFN PIN-Based Debit AK – Alaska PIN-Based Debit AX – American Express/Optima BB – Bill Me Later Small Business Instant Credit BL – Bill Me Later BP – Bill Me Later Private Label CB – Carte Blanche CU – CU24 PIN-Based Debit DC – Diners Club DE – Generic PIN-Based Debit DI – Discover DP – Generic PINless Debit EC – Electronic Check (non encrypted and encrypted accounts) (see Notes for this MOP) ED – European Direct Debit EN – Encryption (see Notes for this MOP) IL – Interlink PIN-Based Debit JC – JCB JN – Jeanie PIN-Based Debit MC – MasterCard MD – MasterCard Diners MP – MoneyPak MT – Maestro PIN-Based Debit NP – NYCE PINless Debit NY – NYCE PIN-Based Debit PP – Pulse PINless Debit

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
			Method of Payment (MOP), (Continued)	<p>PS – Pulse PIN-Based Debit PY – PayPal RC – RevolutionCard SP – Star PINless Debit SR – Star PIN-Based Debit SV – Gift Card SW – Switch/Solo (UK Maestro) SZ – Shazam PIN-Based Debit TP – Tempo PIN-Based Debit VI – Visa/Delta</p> <p>Notes: The encryption MOP (EN) must be used in conjunction with the encryption flag for credit card transactions only. Electronic Check MOP (EC) must be used for all ECP transactions, whether encrypted or not.</p> <p>If card prefix 36 is sent as Diners or MasterCard, Chase Paymentech will process and report the transaction as MasterCard Diners. MOP = MD will be returned in the reply records.</p> <p>For Action Code = PA:</p> <p style="padding-left: 40px;">The generic PINless Debit MOP (DP) <u>must</u> be sent for all PINless Debit transactions or the transaction will reject with Response Reason Code 225 (Invalid Field Data).</p> <p style="padding-left: 40px;">The generic PIN-Based Debit MOP (DE) <u>must</u> be sent for all PIN-Based Debit transactions or the transaction will reject with Response Reason Code 225 (Invalid Field Data).</p> <p>For additional methods of payment processing, please contact your Chase Paymentech Representative.</p>

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
29,47	19	A	Account Number	<p>This number is used to identify the credit card, debit card, or the bank account at the financial institution for ECP transactions.</p> <p>Left justified/blank filled</p> <p>Notes: Encrypted credit card numbers are 16 – 19 positions.</p> <p>U.S. ECP account numbers are not greater than 17 positions.</p> <p>Canadian ECP account numbers are not greater than 12 positions. Allowable characters include upper case alpha (D and S), numeric (0–9), dash (-), and back slash (\).</p> <p>Encrypted ECP numbers can be up to 19 positions.</p> <p>For Bill Me Later, Bill Me Later Private Label, and Bill Me Later Small Business Instant Credit transactions, the account number field should be populated with either the consumer’s Bill Me Later account number or a Bill Me Later Bank Identification Number (BIN) (provided to the merchant by BillMeLater) followed by ten zeros (dummy account number). The consumer’s 16 byte Bill Me Later account number will be returned on all approved transactions.</p> <p>European Direct Debit account numbers are 1 – 16 positions.</p> <p>For MoneyPak, if the Account Number is 20 bytes, this field must be blank or the transaction will reject with Response Reason Code 225 (Invalid Field Data). The 20-byte Account Number is sent in the MoneyPak Format Indicator (MP).</p> <p>See <i>Appendix Q: MoneyPak</i> for additional information on populating this field.</p>

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
			Account Number, (Continued)	See <i>Appendix S: PayPal</i> for additional information on populating this field. Chase Paymentech does not MOD-10 check for ECP, Bill Me later with dummy account numbers, Debit, European Direct Debit, MoneyPak, or RevolutionCard.
48,51	4	N	Expiration Date	<p>MMYY format. Send blanks if the card has expired since the order was placed or if the true expiration date is not known. (Optional)</p> <p>Chase Paymentech assigns the appropriate default value (dependent on the card type) that indicates to the Issuer that the true expiration date of the card is unknown to the merchant.</p> <p>Notes: Omitting the expiration date on a card-not-present transaction, while acceptable to Visa, MasterCard, Discover, American Express and the debit networks, may result in a decline code from the Issuer.</p> <p>For MoneyPak transactions, this field should be blank.</p> <p>For PINless Debit transactions, expiration date should be blank.</p> <p>For RevolutionCard, this field should be blank.</p>

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
62,73	12	N	Amount	<p>Amount of the authorization 2 decimal implied/right justified/zero filled</p> <p>Notes: Minimum amount for all card types (except RevolutionCard) is \$0.01 U.S. dollars (or established international currency equivalent), but no greater than the established Transaction Division limit.</p> <p>If the transaction amount exceeds the default limit, the default limit must be increased in order for the transaction to process. Contact Chase Paymentech Merchant Services at 603-896-8333 prior to processing the transaction.</p> <p>This field must be all zeroes when Action Code = VF or the transaction will reject with Response Reason Code 202 (Bad Amount – Non-numeric Amount).</p> <p>Bill Me Later minimum and maximum transaction amount limits are agreed to between the merchant and BillMeLater.</p> <p>Carte Blanche will decline transactions for less than \$1.00.</p> <p>Discover includes the Cash Over amount if:</p> <ul style="list-style-type: none"> • Action Code = DP, include the Cash Back Amount Approved from the authorization request or the Cash Over Amount from the Extension Record: Discover (EDI001). • Action Code = AU or DC, include the Cash Back Amount Requested.

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments																				
			Amount, (Continued)	Maximum U.S. dollar amount per individual transaction: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">MOP</th> <th style="text-align: right;">Authorization</th> </tr> </thead> <tbody> <tr> <td>American Express</td> <td style="text-align: right;">\$9,999,999.99</td> </tr> <tr> <td>Discover</td> <td style="text-align: right;">\$99,999.99</td> </tr> <tr> <td>MasterCard</td> <td style="text-align: right;">\$9,999,999.99</td> </tr> <tr> <td>MasterCard Diners</td> <td style="text-align: right;">\$9,999,999.99</td> </tr> <tr> <td>MoneyPak</td> <td style="text-align: right;">\$9,999.99</td> </tr> <tr> <td>Other</td> <td style="text-align: right;">\$99,999.99</td> </tr> <tr> <td>PayPal</td> <td style="text-align: right;">\$10,000.00</td> </tr> <tr> <td>RevolutionCard</td> <td style="text-align: right;">\$999,999.99</td> </tr> <tr> <td>Visa</td> <td style="text-align: right;">\$9,999,999.99</td> </tr> </tbody> </table>	MOP	Authorization	American Express	\$9,999,999.99	Discover	\$99,999.99	MasterCard	\$9,999,999.99	MasterCard Diners	\$9,999,999.99	MoneyPak	\$9,999.99	Other	\$99,999.99	PayPal	\$10,000.00	RevolutionCard	\$999,999.99	Visa	\$9,999,999.99
MOP	Authorization																							
American Express	\$9,999,999.99																							
Discover	\$99,999.99																							
MasterCard	\$9,999,999.99																							
MasterCard Diners	\$9,999,999.99																							
MoneyPak	\$9,999.99																							
Other	\$99,999.99																							
PayPal	\$10,000.00																							
RevolutionCard	\$999,999.99																							
Visa	\$9,999,999.99																							
77	1	A	Transaction Type	Describes the circumstances under which the transaction takes place. (Optional) Valid Values: 1 – MOTO Indicator – Single Transaction mail/telephone order: designates a transaction where the cardholder is not present at a merchant location and consummates the sale via the phone or through the mail. The transaction is not for recurring services or product and does not include sales that are processed via an installment plan.																				

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
			Transaction Type, (Continued)	<p>2 – MOTO Indicator – Recurring Transaction: designates a transaction that represents an arrangement between a cardholder and the merchant where transactions are going to occur on a periodic basis.</p> <p>3 – MOTO Indicator – Installment Payment: designates a group of transactions that originated from a single purchase where the merchant agrees to bill the cardholder in installments.</p> <p>4 – MOTO Indicator – Deferred Transaction: designates a transaction that represents an order with a delayed payment for a specified amount of time.</p> <p>5 – ECI Indicator – Secure Electronic Commerce Transaction: designates a transaction consummated via the Internet at a 3-D Secure capable merchant and the cardholder is fully authenticated. (e.g. 3-D Secure includes Verified by Visa and MasterCard SecureCode)</p> <p>6 – ECI Indicator – Non-Authenticated Electronic Commerce Transaction: designates a transaction consummated via the Internet at a 3-D Secure capable merchant that attempted to authenticate the cardholder using 3-D Secure. (e.g. 3-D Secure includes Verified by Visa and MasterCard SecureCode) Attempts occur with Verified by Visa and MasterCard SecureCode transactions in the event of:</p> <ul style="list-style-type: none"> a. A non-participating Issuer b. A non-participating cardholder of a participating Issuer c. A participating Issuer, but the authentication server is not available

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
			Transaction Type, (Continued)	<p>7 – ECI Indicator – Channel Encrypted Transaction: designates a transaction between a cardholder and a merchant consummated via the Internet where the transaction includes the use of transaction encryption such as SSL, but authentication was not performed. The cardholder payment data was protected with a form of Internet security, such as SSL, but authentication was not performed.</p> <p>8 – ECI Indicator – Non-Secure Electronic Commerce Transaction: designates a transaction between a cardholder and a merchant consummated via the Internet where the transaction does not include the use of any transaction encryption such as SSL, no authentication performed, no management of a cardholder certificate.</p> <p>If “8” is sent and MOP = PY, the transaction will reject with Response Reason Code 253 (Invalid Transaction Type).</p> <p>I – IVR (PINless Debit only): designates a transaction where the cardholder consummates the sale via an interactive voice response (IVR) system.</p> <p>If an “I” is sent, but MOP not equal to PINless debit, the transaction will reject with Response Reason Code 253 (Invalid Transaction Type).</p>

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
			Transaction Type, (Continued)	<p>R – Retail Indicator – designates a transaction where the cardholder was present at a merchant location.</p> <p>For European divisions, if an “R” is sent, the transaction will reject with Response Reason Code 253 (Invalid Transaction Type).</p> <p>If an “R” is sent for a transaction with a MOTO Merchant Category Code (MCC) the transaction will downgrade.</p> <p>Notes: Transaction type may be defaulted at the division level. If the default is set, all transactions processed through the division will carry the default Transaction Type value unless this field is populated (population of this field overrides the division level default). Transaction Type must match for both authorization and subsequent deposit.</p> <p>For Verified by Visa and MasterCard SecureCode, the ECI returned at authentication time must be supplied at the transaction level.</p> <p>For MoneyPak, if the Transaction Type does not = 1, 7, or 8, the transaction will reject with Response Reason Code 253 (Invalid Transaction Type).</p> <p>For RevolutionCard - Card Present transactions, the Transaction Type must = R or the transaction will reject with Response Reason Code 253 (Invalid Transaction Type).</p> <p>For RevolutionCard - Card Not Present transactions, the Transaction Type must not = R or the transaction will reject with Response Reason Code 253 (Invalid Transaction Type).</p>

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
			Transaction Type, (Continued)	<p>For recurring transactions, the first transaction should be sent with a Transaction Type of 1, 7, I or R (whichever is applicable). All subsequent transactions should be sent with a Transaction Type of 2.</p> <p>For Discover recurring transactions, all transactions should be sent with a Transaction Type of 2.</p> <p>See <i>Appendix L: Debit Processing</i> for additional information on populating this field.</p> <p>See <i>Appendix AA: RevolutionCard</i> for additional information on populating this field.</p> <p>For Action Code = VF and MOP = MC or MD, if the Transaction Type does not = 2, the transaction will reject with Response Reason Code 253 (Invalid Transaction Type).</p>
82,83	2	A	Action Code	<p>This action tells Chase Paymentech what service to perform on the transaction.</p> <p>Valid values:</p> <ul style="list-style-type: none"> AR – Authorization Reversal (Discover, Gift Card, MasterCard, MasterCard Diners, PayPal, RevolutionCard – Card Not Present, Visa) AU – Authorize (BML, BML PL, Credit Card, Gift Card, PayPal, RevolutionCard – Card Not Present) AV – Re-activation Reversal (Gift Card) BA – Block Activation (Gift Card) BI – Current Balance Inquiry (Discover, Gift Card, MasterCard, MasterCard Diners, MoneyPak, Visa)

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
			Action Code, (Continued)	BV – Block Activation Reversal (Gift Card) CV – Redemption Completion Reversal (Gift Card) DR – Refund Auth Reversal (Debit, RevolutionCard – Card Present) DV – De-activation Reversal (Gift Card) ED – Do Express Payment (PayPal) EG – Get Express Payment (PayPal) ES – Set Express Payment (PayPal) IR – Issuance Activation Reversal (Gift Card) LO – Validate Only (ECP and European Direct Debit) Note: Transaction amount must be 0.00 for EUDD PA – Purchase Auth (Debit, MoneyPak, RevolutionCard – Card Present) Note: Format Indicator Order Information 2 (O2) must be sent with this Action Code for PINless Debit transactions PR – Purchase Auth Reversal (Debit, RevolutionCard – Card Present) PV – Redemption Reversal (Gift Card) RA – Refund Auth (MoneyPak, Debit, RevolutionCard – Card Present) RC – Redemption Completion (Gift Card) RF – Refund (Gift Card) RP – Redemption (Gift Card) RV – Refund Reversal (Gift Card) SA – Add Value (Gift Card)

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Detail Record, (Continued)

Position	Length	Data Type	Field Name	Comments
			Action Code, (Continued)	SD – De-activation (Gift Card) SI – Issuance Activation (Gift Card) SV – Re-activation (Gift Card) VF – Account Verification (MasterCard, MasterCard Diners, RevolutionCard – Card Not Present, Visa) Note: Amount must be \$0.00 VO – Verify Only (ECP U.S.) Note: Amount should be \$0.00 VR – Add Value Reversal (Gift Card) See Table 1: Action Code Definitions

Note: A carriage return (↵) will indicate the end of a transaction and any Format Indicators must be sent before the carriage return (↵).

Continued on next page

RECORD LAYOUTS (Continued)

Table 1: Action Code Definitions

Action Code	Name	Definition
AR	Authorization Reversal	<p>Reverses a prior Action Code = AU (Authorize).</p> <p>Notes: The Reversal is only valid if the authorization has not expired.</p> <p>See <i>Appendix F: Authorization Reversal</i> for specific credit card information.</p> <p>See <i>Appendix P: Gift Card</i> for additional information.</p> <p>See <i>Appendix S: PayPal</i> for additional information.</p>
AU	Authorize	<p>Authorize this transaction.</p> <p>Notes: For Gift Card – Dollar amount is “reserved” on the card account until Action Code = RC (Redemption Completed) or Action Code = AR (Authorization Reversal) is sent.</p> <p>For Gift Card – If the transaction is sent for MCC 5542 and the amount is \$1.00, the entire balance of the card is “locked”. For any other MCC and/or amount, the card is “locked” for that amount. When the sale is complete, Action Code = RC (Redemption Completed) must be sent with the actual sale amount. For MCC 5542 the authorization expires after 3 hours, all other authorizations expire after 7 days.</p>
AV	Re-Activation Reversal	<p>Reverses a prior Action Code = SV (Re-Activation). Amount must be \$0.00.</p> <p>The Gift Card server will decline the transaction if the amount sent causes the card balance to go negative.</p>

Continued on next page

RECORD LAYOUTS (Continued)

Table 1: Action Code Definitions, (Continued)

Action Code	Name	Definition
BA	Block Activation	<p>Activates up to 100 gift cards at one time.</p> <p>Notes: The number of cards to be activated (not including the first card) is sent in Format Indicator FC (Gift Card). Each card will be activated with the value in the Amount field.</p> <p>If any card in the block of cards fails (for example: a card is already active or the card is not “owned” by the merchant) all cards up to the failed card will be set to active with a \$0.00 amount. The failed account number will be identified in Reply Format Indicator F1 (Gift Card Block Activation).</p>
BI	Balance Inquiry	Used to obtain the current balance on an account. Any amount can be sent.
BV	Block Activation Reversal	<p>Reverses a prior Action Code = BA (Block Activation).</p> <p>Notes: The first card number in the series must be sent in Format Indicator FC (Gift Card), identifying the number of cards that were activated in the series. Amount must match the Amount of the original Block Activation.</p> <p>If any activity has been performed on a card in the block (e.g. a redemption on one of the active cards) before the Block Activation Reversal is sent, the entire reversal will fail.</p>
CV	Redemption Completion Reversal	Reverses a prior Action Code = RC (Redemption Completion).
DR	Refund Authorization Reversal	Reverses a prior Action Code = RA (Refund Authorization)
DV	De-activation Reversal	<p>Reverses a prior Action Code = SD (De-activation).</p> <p>Note: Amount sent should be “Previous Balance” returned in the Reply Format Indicator FC (Gift Card) on the prior deactivation.</p>
ED	Do Express Payment	Used to obtain an authorization or identify an order that will subsequently be authorized.
EG	Get Express Payment	Returns information about the customer including name and address that is stored at PayPal.

Continued on next page

RECORD LAYOUTS (Continued)

Table 1: Action Code Definitions, (Continued)

Action Code	Name	Definition
ES	Set Express Payment	Establishes a session with PayPal. Receive a token to be used for browser re-direct to PayPal for customer check out.
IR	Issuance Activation Reversal	Reverses a prior Action Code = SI (Issuance Activation). The Gift Card server will decline the transaction if the amount sent causes the card balance to go negative.
LO	Validate Only	ECP – Validate this transaction against an ACH eligibility file, Notification of Change (NOC) file, and ECP Internal Negative File. European Direct Debit – Validate this transaction against the European Direct Debit Internal Negative File.
PA	Purchase Authorization	Verifies customer's open-to-buy and if the funds are available, debits the customer's account.
PR	Purchase Authorization Reversal	Reverses a prior Action Code = PA (Purchase Authorization).
PV	Redemption Reversal	Reverses a prior Action Code = RP (Redemption).
RA	Refund Authorization	Issues a credit to this account number. Note: To complete the refund, Action Code RF (Refund) must be sent in a settlement file for this transaction.

Continued on next page

RECORD LAYOUTS (Continued)

Table 1: Action Code Definitions, (Continued)

Action Code	Name	Definition
RC	Redemption Completion	<p>Redemption amount to be processed.</p> <p>Used to redeem the amount processed in conjunction with a prior Action Code = AU (Authorize) request.</p> <p>This is similar to Action Code = DP (Deposit) used for batch transactions.</p> <p>If the Partial Redemption flag is set to “yes” and the total redemption amount is higher than the amount available on the card, the entire amount on the card is redeemed and returned in Previous Balance of the Gift Card Reply Format Indicator (FC). The merchant should subtract this amount from the sale amount to create the balance due for the customer.</p> <p>If the amount sent is \$0.00, the card is “unlocked”. This is similar to Action Code = AR (Authorization Reversal).</p>
RF	Refund	<p>Adds the transaction Amount to the balance of an active gift card.</p>
RP	Redemption	<p>One step process that authorizes and does a redemption completion on the gift card.</p> <p>This is similar to Action Code = DC (Conditional Deposit) used for batch transactions.</p> <p>Amount of the transaction must be greater than \$0.00.</p>
RV	Refund Reversal	<p>Reverses a prior Action Code = RF (Refund).</p> <p>The Gift Card server will decline the transaction if the amount sent causes the card balance to go negative.</p>
SA	Add Value	<p>Adds the transaction Amount to the balance of an active gift card.</p>
SD	De-activation	<p>Inactivates a gift card account.</p> <p>Action Code can only be sent for gift cards that currently have an active status.</p> <p>The amount of the transaction must be \$0.00.</p>

Continued on next page

RECORD LAYOUTS (Continued)

Table 1: Action Code Definitions, (Continued)

Action Code	Name	Definition
SI	Issuance Activation	Used to issue and activate individual gift cards. The dollar amount must be greater than \$0.00.
SV	Re-Activation	Re-activates a gift card account with a balance of the amount sent. Only allowed for a card that has been previously de-activated.
VF	Account Verification	Verify this account is valid before performing authorization. The amount of the transaction must be \$0.00.
VO	Verify Only	Verify this transaction against a 3rd party negative file.
VR	Add Value Reversal	Reverses a prior Action Code = SA (Add Value). The Gift Card server will decline the transaction if the amount sent causes the card balance to go negative.

RECORD LAYOUTS (Continued)

Additional Request Processing Formats

Additional formats required for a transaction can be sent sequentially, in any order. Below is the list of formats available. Please refer to the record layout section of each specified format for data lengths and elements.

Format Indicator	Description	Number of bytes in format	Comments	Record Layout Page Number
AS	Ship to Address	139	Ship to address	21
CO	Cash Back	14	Cash received in addition to purchase	23
PB	Partial Authorization	3	Partial Authorization	24
RC	RevolutionCard	53	RevolutionCard	27
RE	Retail	82 (Track 1) 45 (Track 2)	Includes track 1 and track 2 data elements	29
R3	Retail 3	9 - 84	Varying length data track	32

RECORD LAYOUTS (Continued)

Ship to Address Format Indicator

Length	Data Type	Field Name	Comments
2	A	Format Indicator	“AS” Constant – Ship to address information. Specifies this record as an additional processing format of the Chase Paymentech standard format.
1	A	Telephone Type	Telephone type. (Optional) Valid values: D – Day H – Home N – Night W – Work
14	A	Telephone Number	Phone number for ship to recipient. (Optional) AAAEENNNNXXXX format where: AAA = Area Code EEE = Exchange NNNN = Number XXXX = Extension
30	A	Name Text	Ship to name (asterisk should precede last name). (Optional) Left justified/blank filled
30	A	Address Line 1	Ship to address information. (Optional) Left justified/blank filled
28	A	Address Line 2	Ship to address information. (Optional) Left justified/blank filled
2	A	Country Code	Ship to country code. (Optional) Valid values: US – United States CA – Canada GB – Great Britain UK – United Kingdom “ ” – Blank for all other countries

Continued on next page

RECORD LAYOUTS (Continued)

Ship to Address Format Indicator, (Continued)

Length	Data Type	Field Name	Comments
20	A	City	Ship to city.(Optional) Left justified/blank filled
2	A	State	Ship to state.(Optional) Left justified/blank filled
10	A	Postal Code	Ship to postal code.(Optional) Left justified/blank filled

Notes: For American Express address verification, Address Line 1 and/or Address Line 2, Name Text, and Telephone Number fields cannot be populated with all zeros and/or slashes or the transaction will reject with Response Reason Code 225 (Invalid Field Data).

For RevolutionCard transactions, it is highly recommended that the merchant send in AVS information. Revolution Money checks the ship to address information against the billing address that is on file for fraud protection purposes.

For RevolutionCard - Card Not Present transactions, when Action Code = VF, street address and postal code must be sent or the transaction will reject with Response Reason Code 227 (Missing Companion Data).

Sample

8	9	0	1	2	3	4	5
56789012345678901234567890123456789012345678901234567890123456789							
ASD6038968000		JOHN D. *SMITH			4 NORTHEASTERN BLVD		

6	7	8	9	0	1	2
0123456789012345678901234567890123456789012345678901234567890123						
PO BOX 92		USSALEM		NH03079		

RECORD LAYOUTS (Continued)

Cash Back Format Indicator

Length	Data Type	Field Name	Comments
2	A	Format Indicator	“CO” Constant – Cash back information. Specifies this record as an additional processing format of the Chase Paymentech standard format.
12	N	Cash Back Amount Requested	<p>Amount requested by the consumer to be returned as cash.</p> <p>2 decimal implied/right justified/zero filled</p> <p>Notes: For Discover, if the Cash Back Amount Requested is not \$20.00, \$40.00, \$60.00, \$80.00, or \$100.00, this transaction will reject with Response Reason Code 268 (Invalid Cash Back Amount).</p> <p>For Discover, if the Cash Back Amount Requested is not less than the total transaction amount, this transaction will reject with Response Reason Code 268 (Invalid Cash Back Amount).</p> <p>For RevolutionCard – Card Present transactions, the Cash Back Amount Requested cannot be greater than the total transaction amount or the transaction will reject with Response Reason Code 268 (Invalid Cash Back Amount).</p>

Notes: This Format Indicator can only be sent when MOP = DI or RC or the transaction will reject with Response Reason Code 225 (Invalid Field Data).

If Transaction Type is not equal to R (Retail), the transaction will reject with Response Reason Code 253 (Invalid Transaction Type).

Sample

8 0 56789012345678 CO000000002000
--

RECORD LAYOUTS (Continued)

Partial Authorization Format Indicator

Length	Data Type	Field Name	Comments
2	A	Format Indicator	<p>“PB” Constant – Partial authorization information. Specifies this record as an additional processing format of the Chase Paymentech standard format.</p>
1	A	Partial Redemption Indicator Flag	<p>Determines approval functionality for pre-paid/gift card authorizations.</p> <p>Valid values for American Express:</p> <ul style="list-style-type: none"> Y – Transaction is not declined if authorization amount is greater than the current balance N – Transaction is declined if authorization amount is greater than the current balance <p>Valid values for Discover:</p> <ul style="list-style-type: none"> Y – The sale amount can be partially approved but the cash back amount cannot be partially approved. N – Merchant does not support partial authorization. Partial authorization not allowed for both sale amount and cash back amount. B – Both sale amount and cash back may be partially approved. The sale amount must be fully approved before the cash back amount can be partially approved. C – The sale amount must be fully approved before the cash back amount may be partially approved. X – Merchant may support partial auth, but the sale amount must be fully approved before the cash back amount can be approved. Neither the sale amount nor the cash back amount can be partially approved.

Continued on next page

RECORD LAYOUTS (Continued)

Partial Authorization Format Indicator, (Continued)

Length	Data Type	Field Name	Comments
		Partial Redemption Indicator Flag, (Continued)	<p>Valid values for Visa, MasterCard, MasterCard Diners:</p> <ul style="list-style-type: none"> Y – Attempt a partial authorization if allowed for the account. N – Do not attempt a partial authorization. <p>Valid values for MoneyPak:</p> <ul style="list-style-type: none"> Y – Attempt a partial authorization. N – Do not attempt a partial authorization. <p>Valid values for RevolutionCard:</p> <ul style="list-style-type: none"> Y – Attempt a partial authorization. N – Do not attempt a partial authorization.

Continued on next page

Partial Authorization Format Indicator, (Continued)

Notes: See *Appendix G: Partial Authorization* for more details on populating this Format Indicator.

American Express Notes:

Sending the Partial Redemption Indicator Flag does **not** override the division default.

American Express returns the current balance.

This Format Indicator should not be sent unless the division has been certified with American Express for Partial Authorization.

Discover Notes:

Sending the Partial Redemption Indicator Flag overrides the division default.

Discover does not return the current balance.

MasterCard, MasterCard Diners and Visa Notes:

Sending the Partial Redemption Indicator Flag overrides the division default.

If the account number is not partial authorization-capable, the Partial Redemption Indicator Flag is ignored.

Visa, MasterCard and MasterCard Diners may return the current balance.

MoneyPak Note:

Sending the Partial Redemption Indicator Flag overrides the division default.

RevolutionCard Note:

Sending the Partial Redemption Indicator Flag overrides the division default.

Sample

8
567
PBY

RECORD LAYOUTS (Continued)

RevolutionCard Format Indicator

Length	Data Type	Field Name	Comments
2	A	Format Indicator	“RC” Constant – RevolutionCard information. Specifies this record as an additional processing format of the Chase Paymentech standard format.
4	A	One Time Token ID	Single use, time-stamped token. (Optional) Left justified/blank filled Notes: Used for one time authorization. For RevolutionCard - Card Not Present transactions, a token is required when Action Code = AU and Transaction Type does not = 2 or the transaction will reject with Response Reason Code 227 (Missing Companion Data).
16	A	Encrypted PIN Number	Encrypted PIN number entered by customer. (Optional) Left justified/blank filled Note: Required when Transaction Type = R or the transaction will reject with Response Reason Code 227 (Missing Companion Data).
16	A	PIN Key Sequence Number (KSN)	Key sequence number (from the PIN pad) (Optional) Left justified/blank filled Note: Required when Transaction Type = R or the transaction will reject with Response Reason Code 227 (Missing Companion Data).

Continued on next page

RECORD LAYOUTS (Continued)

RevolutionCard Format Indicator, (Continued)

Length	Data Type	Field Name	Comments
15	A	Transaction ID	Transaction ID returned from vendor. (Optional) Left justified/blank filled

Notes: This format indicator can only be sent when MOP = RC or the transaction will reject with Response Reason Code 225 (Invalid Field Data).

This Format Indicator must be sent for all RevolutionCard transactions where Transaction Type = R, or the transaction will reject with Response Reason Code 227 (Missing Companion Data).

This Format Indicator must be sent for all RevolutionCard transactions where Action Code = AU and Transaction Type = 1, 3, 4, 7, or 8, or the transaction will reject with Response Reason Code 227 (Missing Companion Data).

Sample

8	9	0	1	2	3
56789012345678901234567890123456789012345678901234567					
RC	PINPIN		KEYKEY		

RECORD LAYOUTS (Continued)

Retail Format Indicator

Length	Data Type	Field Name	Comments
2	A	Format Indicator	“RE” Constant – Retail information. Specifies this record as an additional processing format of the Chase Paymentech standard format.
1	N	POS Capability Code	This field defines the ability of the POS terminal or cash register. Valid value: 2 – Magnetic stripe reader
2	N	POS Entry Mode	This field indicates how the transaction was entered. Valid value: 90 – Entire magnetic stripe read and transmitted
1	N	Track Indicator	Track that was read. Valid Values: 1 – Track 1 2 – Track 2 Note: When MOP = RC and Track Indicator = 1, the transaction will reject with Response Reason Code 225 (Invalid Field Data).
76 (T1) 39 (T2)	A	Swipe Data	Actual data from the card swipe. (DO NOT MANIPULATE or alter swipe data in any way). Left justified/blank filled Notes: Start sentinel (%) indicates the initial data position on the track. End sentinel (?) is the character that follows the final character of data recorded on the track.

Continued on next page

RECORD LAYOUTS (Continued)

Retail Format Indicator, (Continued)

Length	Data Type	Field Name	Comments
		Swipe Data, (Continued)	<p>Notes:</p> <p>Longitudinal Redundancy Check (LRC) is a verification value that ensures that no data has been lost in the stripe reading process. The LRC is equivalent to a check digit of the entire track, including the control characters. The LRC is directly after the end sentinel.</p> <p>For Bill Me Later Private Label, the start sentinel and end sentinel must be sent with the track data.</p> <p>For all other MOPs, the start sentinel, end sentinel and LRC must be removed.</p> <p>Swipe data must be sent in all upper case.</p>

Notes: If manually keyed, do not use this record – use an AVS Format Indicator.

Postal code is the minimum requirement to obtain the lowest possible interchange rate for manually keyed transactions.

When sending Postal Code Format Indicator (AZ), the postal code sent should be the cardholder's postal code, otherwise some issuers may decline the transaction.

Retail Track 1, Track 2 format used in authorizations only.

Can send Track 1 or Track 2.

Either Format Indicator “RE” or “R3” can be sent for swipe data.

Format Indicator “R3” **must** be sent for **American Express** swipe data.

Qualification for best rates **cannot** be verified during testing. Contact your Account Executive after first deposit to verify qualification.

For PIN-Based Debit Retail Track 2 data is used for authorizations, refunds, and reversals.

For Electronic Check Processing/Point of Purchase do not send this Format Indicator.

Continued on next page

RECORD LAYOUTS (Continued)

Retail Format Indicator, (Continued)

Notes (Continued):

For RevolutionCard – Card Present transactions, Track 2 data is used for authorizations, refund authorizations, and refund authorization reversals.

Sample Retail Input for Magnetic Stripe Read – Track 1

8	9	0	1	2	3	4	5
56789012345678901234567890123456789012345678901234567890123456							
RE2901TRACK1 SWIPE DATA							

Sample Retail Input for Magnetic Stripe Read – Track 2

8	9	0	1
56789012345678901234567890123456789			
RE2902TRACK1 SWIPE DATA			

RECORD LAYOUTS (Continued)

Retail 3 Format Indicator

Length	Data Type	Field Name	Comments
2	A	Format Indicator	“R3” Constant – Retail information 3. Specifies this record as an additional processing format of the Chase Paymentech standard format.
1	N	POS Capability Code	Defines the ability of the POS terminal or cash register. Valid value: 2 – Magnetic stripe reader
2	N	POS Entry Mode	Indicates how the transaction was entered. Valid value: 90 – Entire magnetic stripe read and transmitted
1	N	Track Indicator	Track that was read. Valid values: 1 – Track 1 2 – Track 2 Note: When MOP = RC and Track Indicator = 1, the transaction will reject with Response Reason Code 225 (Invalid Field Data).
2	N	Length Indicator	Indicates the number of positions submitted for the following field: Valid values: 01 - 76

Continued on next page

RECORD LAYOUTS (Continued)

Retail 3 Format Indicator, (Continued)

Length	Data Type	Field Name	Comments
Variable 1-76	A	Swipe Data	<p>Actual data from the card swipe. (DO NOT MANIPULATE or alter swipe data in any way).</p> <p>Left justified</p> <p>Notes: Start sentinel (%) indicates the initial data position on the track.</p> <p>End sentinel (?) is the character that follows the final character of data recorded on the track.</p> <p>Longitudinal Redundancy Check (LRC) is a verification value that ensures that no data has been lost in the stripe reading process. The LRC is equivalent to a check digit of the entire track, including the control characters. The LRC is directly after the end sentinel.</p> <p>For Bill Me Later Private Label, the start sentinel and end sentinel must be sent with the track data.</p> <p>For all other MOPs, the start sentinel, end sentinel and LRC must be removed.</p> <p>Swipe data must be sent in all upper case.</p>

Continued on next page

RECORD LAYOUTS (Continued)

Retail 3 Format Indicator, (Continued)

Notes: If manually keyed, do not use this record – use an AVS Format Indicator.

Postal code is the minimum requirement to obtain the lowest possible interchange rate for manually keyed transactions.

When sending Postal Code Format Indicator (AZ), the postal code sent should be the cardholder's postal code, otherwise some issuers may decline the transaction.

Retail Track 1, Track 2 format used in authorizations only.

Can send Track 1 or Track 2.

Either Format Indicator "RE" **or** "R3" can be sent for swipe data.

Format Indicator "R3" **must** be sent for **American Express** swipe data.

Qualification for best rates **cannot** be verified during testing. Contact your Account Executive after first deposit to verify qualification.

For PIN-Based Debit Retail Track 2 data is used for authorizations and reversals.

For Electronic Check Processing/Point of Purchase do not send this Format Indicator.

For RevolutionCard – Card Present transactions, Track 2 data is used for authorizations, refund authorizations, and refund authorization reversals.

Sample

8	9	0	1
56789012345678901234567890123			
R3290221	TRACK DATA	0123456789	

RECORD LAYOUTS (Continued)

Online Processing Return Format Record

Position	Length	Data Type	Field Name	Comments
68,69	2	A	Method of Payment (MOP)	<p>This field defines the MOP associated with this order.</p> <p>Valid Values:</p> <ul style="list-style-type: none"> AE – ACCEL PIN-Based Debit AF – AFFN PIN-Based Debit AK – Alaska PIN-Based Debit AX – American Express/Optima BB - Bill Me Later Small Business Instant Credit BL – Bill Me Later BP – Bill Me Later Private Label CB – Carte Blanche CU – CU24 PIN-Based Debit DC – Diners Club DE – Generic PIN-Based Debit DI – Discover DP – Generic PINless Debit EC – Electronic Check ED – European Direct Debit IL – Interlink PIN-Based Debit JC – JCB JN – Jeanie PIN-Based Debit MC – MasterCard MD – MasterCard Diners MP – MoneyPak MT – Maestro PIN-Based Debit NP – NYCE PINless Debit NY – NYCE PIN-Based Debit

Continued on next page

RECORD LAYOUTS (Continued)

Online Processing Return Format Record, (Continued)

Position	Length	Data Type	Field Name	Comments
			Method of Payment (MOP), (Continued)	<p>Valid values (Continued):</p> <ul style="list-style-type: none"> PP – Pulse PINless Debit PS – Pulse PIN-Based Debit PY – PayPal RC – RevolutionCard SP – Star PINless Debit SR – Star PIN-Based Debit SV – Gift Card SW – Switch/Solo (UK Maestro) SZ – Shazam PIN-Based Debit TP – Tempo PIN-Based Debit VI - Visa/Delta <p>Notes: For an encrypted transaction, the return record will include the actual method of payment.</p> <p>If decryption of Account Number fails, this field will be blank.</p> <p>Debit Notes: All successful PIN-Based and PINless Debit transactions will be returned with the specific MOP the transaction was processed under. This specific MOP must be sent at deposit time or the transaction will reject with Response Reason Code 741 (Validation Failed). All unsuccessful transactions may be returned with the specific MOP or a generic MOP (DE or DP).</p>

Continued on next page

RECORD LAYOUTS (Continued)

Return Response Processing Formats

The following Format Indicators may be returned sequentially, in any order, with the Return Format Record beginning in position 85. The Reply Format Indicator may not be returned with front-end rejects.

Format Indicator	Description	Number of bytes in format	Comments	Record Layout Page Number
PB	Partial Authorization	26	Partial Authorization Reply	38
RC	RevolutionCard	25	RevolutionCard	39

RECORD LAYOUTS (Continued)

Partial Authorization Reply Format Indicator

Length	Data Type	Field Name	Comments
2	A	Format Indicator	“PB” Constant – Partial authorization information. Specifies this record as an additional processing reply format of the Chase Paymentech standard format.
12	N	Current Balance	Current balance. 2 decimal implied/right justified/zero filled Notes: American Express returns the current balance. Discover does not return the current balance. MasterCard, MasterCard Diners and Visa may return the current balance. MoneyPak does not return the current balance. RevolutionCard does not return the current balance.
12	N	Redemption Amount	Approved amount. 2 decimal implied/right justified/zero filled or blanks

Notes: This Reply Format Indicator could be returned for any partial authorization-capable transaction (i.e. via division default or Partial Redemption Indicator Flag).

See *Appendix G: Partial Authorization* for specific information on when this Reply Format Indicator is returned.

Sample

8	9	0	1
56789012345678901234567890			
PB0000000000999000000000999			

RECORD LAYOUTS (Continued)

RevolutionCard Reply Format Indicator

Length	Data Type	Field Name	Comments
2	A	Format Indicator	“RC” Constant – RevolutionCard information. Specifies this record as an additional processing reply format of the Chase Paymentech standard format.
15	A	Transaction ID	Transaction ID returned from vendor. Left justified/blank filled Note: This value should be stored and sent for all subsequent transactions when Action Code = RA, RF, or DP.
8	A	Trace Number	Trace number returned from vendor. Left justified/blank filled Note: This value must be stored and sent for all subsequent transactions when Action Code = DP or RF.

Note: This reply format indicator is returned when MOP = RC.

Sample

8	9	0
5678901234567890123456789		
RC12345678901234598765432		

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE

**Chase
Paymentech
Response
Reason
Codes**

The following list reflects all currently defined Chase Paymentech response reason codes. Many of these codes will never be returned in your output.

For the most common codes returned by Chase Paymentech, the list includes an action field that suggests the best probable course of action to take based on the code returned. If you are receiving codes not listed here, please contact your Account Manager. For ECP transactions, please refer to the Electronic Check Processing User Guide for additional information including return codes, dishonor codes and response actions.

The following KEY describes the Column Headings and the values appearing in the columns.

Note: Not all codes will be received on an authorization. Some codes are for deposit/conditionals only.

KEY

Column Heading	Description
Type	S = Successful Response Codes R = Reject Response Codes D = Decline Response Codes
Code	3-digit response code
Name	Description of the response code
Action	Resend = Send this transaction back at any time Wait = Wait 2-3 days before sending back, or try to resolve with your customer Cust. = Try to resolve with customer, or get an alternate method of payment Fix = There is an invalid field being sent Fix and resend N/A = Not applicable Voice = Perform a voice authorization per Chase Paymentech instructions Call = Call Chase Paymentech
Payment Method	BML = Bill Me Later Cards/Bill Me Later Private Label BML PL = Bill Me Later Private Label only CC = All Credit Cards DB = All Debit Cards ECP = Electronic Check Processing ED = European Direct Debit MP = MoneyPak PY = PayPal RC = RevolutionCard SV = Gift Card SW = Switch/Solo (UK Maestro)

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
D	000	No Answer	Resend	BML, CC, ED, MP, PY, SV	Chase Paymentech received no answer from auth network.
S	100	Approved	N/A	All	Successfully approved.
S	101	Validated	N/A	ECP, ED	Account passed Chase Paymentech negative file and data edit check.
S	102	Verified	N/A	ECP	Account passed external negative file.
S	103	Pre-noted	N/A	ECP	Passed pre-note.
S	104	No Reason to Decline	N/A	CC, ECP, RC	Successfully approved.
S	105	Received and Stored	N/A	CC	Successfully approved. Note: FPO only.
S	106	Provided Auth	N/A	CC	Successfully approved. Note: Indicates customized code was used in processing.
S	107	Request Received	N/A	CC	Successfully approved. Note: Indicates customized code was used in processing.
S	108	Approved for Activation	N/A	CC	Successfully activated. Note: Indicates customized code was used in processing.
S	109	Previously processed Transaction	N/A	DB, RC	Transaction was not re-authorized with the Debit Network because it was previously processed.
S	110	BIN Alert	N/A	CC	Successfully approved. Note: Indicates customized code was used in processing.
S	111	Approved for Partial	N/A	CC	Successfully approved. Note: Indicates customized code was used in processing.
S	164	Conditional Approval	Wait	BML	Conditional Approval - Hold shipping for 24 hours.
R	201	Invalid Account Number	Cust.	All	Bad check digit, length, or other credit card problem.

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
R	202	Bad Amount Non-numeric Amount	Fix	All	Amount sent was zero, unreadable, over ceiling limit, or exceeds maximum allowable amount.
R	203	Zero Amount	Fix	CC, ECP	Amount sent was zero.
R	204	Other Error	Fix	All	Unidentifiable error.
R	205	Bad Total Auth Amount	Fix	CC	The sum of the authorization amount from extended data information does not equal detail record authorization amount. Amount sent was zero, unreadable, over ceiling limit, or exceeds maximum allowable amount.
R	218	Invalid SKU Number	Fix	CC	Non-numeric value was sent.
R	219	Invalid Credit Plan	Fix	CC	Non-numeric value was sent.
R	220	Invalid Store Number	Fix	CC	Non-numeric value was sent.
R	225	Invalid Field Data	Fix	CC, DB, ED, MP, PY, RC	Data within transaction is incorrect.
R	227	Missing Companion Data	Fix	BML, CC, ED, PY, RC	Specific and relevant data within transaction is absent.
R	229	Percents Do Not Total 100	Fix	CC, ECP	FPO monthly payments do not total 100. Note: FPO only
R	230	Payments Do Not Total Order	Fix	CC, ECP	FPO monthly do not total order. Note: FPO only
R	231	Invalid Division Number	Fix	All	Division number incorrect.
R	233	Does Not Match MOP	Fix	CC	Credit card number does not match method of payment type or invalid BIN.

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
R	234	Duplicate Order Number	Fix	CC	Unique to authorization recycle transactions. Order number already exists in system Note: Auth Recycle only
R	235	FPO Locked	Resend	CC, ECP	FPO change not allowed Note: FPO only
R	236	Auth Recycle Host System Down	Resend	CC	Authorization recycle host system temporarily unavailable. Note: Auth Recycle only
R	237	FPO Not Allowed	Call	CC, ECP	Division does not participate in FPO. Contact your Chase Paymentech Representative for information on getting set up for FPO. Note: FPO only
R	238	Invalid Currency	Fix	All	Currency does not match Chase Paymentech merchant setup for division.
R	239	Invalid MOP for Division	Fix	All	Method of payment is invalid for the division.
R	240	Auth Amount Wrong	Fix	CC, ECP	Used by FPO.
R	241	Illegal Action	Fix	All	Invalid action attempted.
R	243	Invalid Purchase Level III	Fix	CC	Data is inaccurate or missing, or the BIN is ineligible for P-card.
R	244	Invalid Encryption Format	Fix	CC, ECP	Invalid encryption flag. Data is inaccurate.
R	245	Missing or Invalid Secure Payment Data	Fix	CC	Visa, MasterCard or UK Domestic Maestro authentication data not in appropriate Base 64 encoding format or data provided on a non-e-Commerce transaction.

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
R	246	Merchant Not MasterCard SecureCode Enabled	Call	CC	Division does not participate in MasterCard or UK Domestic Maestro Secure Code. Contact your Chase Paymentech Representative for information on getting setup for MasterCard or UK Domestic Maestro SecureCode.
R	247	Check Conversion Data Error	Fix	ECP	Proper data elements were not sent for POP/ARC transactions.
R	248	Blanks Not Passed in Reserved Field	Fix	All	Blanks not passed in Reserved Field.
R	249	Invalid MCC	Fix	All	Invalid Merchant Category Code (MCC) sent.
R	251	Invalid Start Date	Fix	SW	Incorrect start date or card may require an issue number, but a start date was submitted. Note: Switch/Solo only
R	252	Invalid Issue Number	Fix	SW	Issue number invalid for this BIN. Note: Switch/Solo only
R	253	Invalid Transaction Type	Fix	All	Invalid transaction type for this order.
R	257	Missing Customer Service Phone	Fix	CC	Customer Service Phone Number required on Transaction Types 1 (MOTO) and 2 (Recurring). Note: MasterCard/MasterCard Diners Only

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
R	258	Not Authorized to Send Record	Fix	All	Division is not authorized to send record.
D	260	Soft AVS	Cust.	CC	Card was authorized, but AVS did not match. The 100 was overwritten with a 260 per the merchant's request. Note: Conditional deposits only.
R	261	Account not Eligible for Division's Setup	N/A	CC	Account number not eligible for division's Account Updater Program setup.
R	262	Authorization Code/ Response Date Invalid	Fix	CC	Authorization code and/or response date are invalid. Note: MOP = MC, MD, VI only
R	263	Partial Authorization Not Allowed or Partial Authorization Request Not Valid	Fix	CC	Action code or division does not allow partial authorizations or partial authorization request is not valid.
R	264	Duplicate Deposit Transaction	N/A	DB, RC	Transaction is a duplicate of a previously deposited transaction. Transaction will not be processed.
R	265	Missing QHP Amount	Fix	CC	Missing QHP amount.
R	266	Invalid QHP Amount	Fix	CC	QHP amount greater than transaction amount.
R	267	Merchant Not IIAS Enabled	Call	CC	Division does not participate in Healthcare IIAS. Contact your Chase Paymentech. Representative for information on getting setup for Healthcare IIAS.
R	268	Invalid Cash Back Amount	Fix	CC	Cash back amount is not between \$20 and \$100 and is not an increment of \$20.
R	269	Bin Blocked	Cust.	CC	Bin number is in a blocked bin listing. Note: MOP = MC, VI, AX, and Switch/Solo only

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
R	270	Card Number Is Stopped	Cust.	CC	Card number is in a stop card number listing.
R	271	Country Is Blocked	Cust.	CC	Issuing country of the card is in a blocked country listing. Note: MOP = MC, VI, DI only
R	273	Cash Over Not Allowed on MCC	Fix	CC	Cash Over cannot be processed under this MCC. Note: MOP = DI only
D	301	Issuer Unavailable	Resend	CC, DB, ED, RC, SV, SW	Authorization network could not reach the bank which issued the card.
D	302	Credit Floor	Wait	BML, CC, SV	Insufficient funds.
D	303	Processor Decline	Cust.	CC, MP, DB, ED, PY, RC, SV	Generic decline – No other information is being provided by the Issuer.
D	304	Not On File	Cust.	BML, CC, DB, PY, RC, SV	No card record, or invalid/non-existent to account specified. PayPal – Billing agreement ID or transaction ID not valid
D	305	Already Reversed	N/A	CC, DB, RC	Transaction previously reversed. Note: MOP = any Debit MOP, MC, MD, RC, VI
D	306	Amount Mismatch	Fix	CC	Requested reversal amount does not match original approved authorization amount. Note: MOP = MC, MD, VI only
D	307	Authorization Not Found	Fix	CC	Transaction cannot be matched to an authorization that was stored in the database. Note: MOP = MC, MD, VI only
D	401	Call	Voice	CC, DB, RC, SW	Issuer wants voice contact with cardholder.
D	401	Decline	Cust.	BML	Decline
D	402	Default Call	Voice	CC	Decline
D	452	Account Already Redeemed	Cust.	MP	Account has no available funds.

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
D	456	Invalid Refund Amount	Cust.	MP	Refund amount does not match deposit amount.
D	457	Verification Denied	Cust.	MP	Generic Decline - No other information is being provided by the issuer.
D	458	Verification Error	Cust.	MP	Generic Decline - No other information is being provided by the issuer.
D	461	Account Is Not Redeemed	Cust.	MP	Account has not been activated.
D	465	Account Already Refunded	Cust.	MP	Amount already refunded.
D	468	Number of Agreements Exceeded	Cust	PY	Maximum number of agreements was exceeded.
D	469	More Than One Agreement	Cust	PY	More than one agreement specified for reference transaction.
D	470	Agreement Types Cannot be Mixed	Cust	PY	Agreement types cannot be mixed in the same project.
D	471	Invalid Agreement Type	Cust	PY	Invalid agreement type.
D	472	Buyer Did Not Accept Agreement	Cust	PY	Buyer did not accept agreement.
D	473	Agreement for Transaction Already Created	Cust	PY	An agreement for the transaction has already been created. Token has already been used to create a billing agreement.

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
D	474	Billing Address Does Not Exist	Cust	PY	Billing address request does not exist for the merchant.
D	501	Pickup	Cust.	BML, CC, DB, RC, SW	Card Issuer wants card returned.
D	502	Lost/Stolen	Cust.	CC, DB, RC, SV	Card reported as lost/stolen. Note: Does not apply to American Express
D	503	Fraud/ Security Violation	Cust.	CC	CID did not match. Note: Discover only
D	505	Negative File	Cust.	BML	On negative file.
D	508	Excessive PIN Try	Cust.	CC	Allowable number of PIN tries exceeded.
D	509	Over Limit	Cust.	BML, CC, PY, SV	Exceeds withdrawal or activity amount limit.
D	510	Over Frequency Limit	Cust.	CC, SV	Exceeds withdrawal or activity count limit.
D	519	On Negative File	Cust.	ECP	Account number appears on negative file.
D	521	Insufficient Funds	Cust.	BML PL, PY, CC, SV	Insufficient funds/over credit limit.
D	522	Card is Expired	Cust.	CC, DB, RC, SV, SW	Card has expired.
D	523	Encryption Data Bad	Fix	DB, RC	Encryption data is bad.
D	524	Altered Data	Fix	BML, DB, RC	Altered Data\Magnetic stripe incorrect.
D	530	Do Not Honor	Cust.	BML, CC, DB, ED, PY, RC, SW	Generic decline – No other information is being provided by the Issuer. Note: This is a hard decline for Bill Me Later (will never pass with recycle attempts).

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
D	531	CVV2/VAK Failure	Cust.	BML, CC	Issuer has declined auth request because CVV2 or VAK failed.
D	534	Do Not Honor – High Fraud	Cust.	PY	The transaction failed PayPal's risk models.
D	540	Under 18 Years Old	Cust.	BML	The date of birth indicates customer is less than 18 years of age.
D	541	Possible Compromise	Cust.	BML	Customer reported possible compromise and blocked account.
D	542	Bill To Not Equal Ship To	Cust.	BML	Bill to address does not match ship to address.
D	543	Invalid Pre-approval Number	Cust.	BML	Pre-approval number not recognized.
D	544	Invalid Email Address	Cust.	BML	Email address failed standard validation rules.
D	545	PA ITA Number Inactive	Cust.	BML	Pre-approval number no longer valid.
D	546	Blocked Account	Cust.	BML	Billing system account status.
D	547	Address Verification Failed	Fix	BML	Billing address could not be verified.
D	548	Not on Credit Bureau	Cust.	BML	Need more information. Request full social security number.
D	549	Previously Declined	Cust.	BML	Customer previously declined.
D	550	Closed Account, New Account Issued	Cust.	BML	Closed Account. New Account Issued.
D	551	Duplicate Transaction	Fix	BML, ED, PY	Trans ID in combination with merchant ID is not unique (order number not unique). PayPal – the transaction was previously processed.
D	560	Re-authorization	Fix	BML	Re-authorization request is declined. Original authorization could not be found.

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
D	561	Re-authorization No Match	Fix	BML	Re-authorization request is declined. The customer account number, merchant id, or amount did not match the original authorization.
D	562	Re-authorization Amount Exceeded	Fix	BML	Re-authorization request is declined. The amount significantly exceeds the original request amount.
D	563	Re-authorization-Timeframes Exceeded	Fix	BML	Re-authorization request is declined. The timeframes for re-authorization have been exceeded.
D	564	Counter Offer	Cust.	BML	Counter Offer to Supply Personal Guaranty.
D	567	Pending review	Wait	BML	Pending review by BillMeLater wait 24 hours.
D	570	Stop Payment Order One Time Recurring / Installment	Cust.	CC	Cardholder has requested this one recurring/installment payment be stopped.
D	571	Revocation of Authorization for All Recurring / Installments	Cust.	CC	Cardholder has requested all recurring/installment payments be stopped.
D	572	Revocation of All Authorizations – Closed Account	Cust.	CC	Cardholder has requested that all authorizations be stopped for this account due to closed account. Note: Visa only
D	580	Account Previously Activated	N/A	SV	Account previously activated.
D	581	Unable to Void	N/A	SV	Unable to void.
D	582	Block Activation Failed	Fix	SV	Block activation failed – card range not setup for MOD 10.
D	583	Block Activation Failed	Fix	SV	Block activation failed – email or fulfillment flags were set to 'Y'.
D	584	Issuance Does Not Meet Minimum Amount	Fix	SV	Issuance does not meet minimum amount.

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
D	585	No Original Authorization Found	N/A	SV	No original authorization found.
D	586	Outstanding Authorization, Funds on Hold	N/A	SV	Outstanding authorization, funds on hold.
D	587	Activation Amount Incorrect	Fix	SV	Activation amount incorrect.
D	588	Block Activation Failed	Fix	SV	Block activation failed – account not correct or block size not correct.
D	589	CVD Value Failure	Cust.	SV	Magnetic stripe CVD value failure.
D	590	Maximum Redemption Limit Met	Cust.	SV	Maximum redemption limit met.
D	591	Invalid CC Number	Cust.	CC, DB, RC, MP	Bad check digit, length or other credit card problem. Issuer generated.
D	592	Bad Amount	Fix	BML, CC	Amount sent was zero or unreadable. Issuer generated.
D	594	Other Error	Fix	BML, CC, DB, ED, PY, RC, SV	Unidentifiable error. Issuer generated. For Bill Me Later – bill to country must be equal to U.S. For PayPal – the invoice number is not unique, a contract ID is required, or amount, tax, shipping and handling amounts are formatted incorrectly.
D	595	New Card Issued	Cust.	CC	New Card Issued.
D	596	Suspected Fraud	Cust.	CC	Issuer has flagged account as suspected fraud.
D	597	Account Lookup Not Allowed for Merchant	Cust	CC	Account Lookup not allowed for merchant.

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
D	599	Refund not allowed	N/A	DB, PY	For Debit – Refund Authorization not allowed on a Star only BIN card or BIN not found. For PayPal - Refund not allowed.
D	602	Invalid Institution Code	Fix	CC	Card is bad, but passes MOD 10 check digit routine, wrong BIN.
D	603	Invalid Institution	Cust.	CC, DB, RC	Institution not valid. (i.e. possible merger)
D	605	Invalid Expiration Date	Cust.	BML, CC, SW	Card has expired or bad date sent. Confirm proper date.
D	606	Invalid Transaction Type	Cust.	CC, DB, MP, RC, SV, SW	Issuer does not allow this type of transaction.
D	607	Invalid Amount	Fix	CC, DB, ED, MP, RC, SV	Amount not accepted by network.
D	610	BIN Block	Cust.	CC	Merchant has requested Chase Paymentech not process credit cards with this BIN.
S	704	FPO Accepted	N/A	CC, ECP	Stored in FPO database.
D	719	On Negative File	Cust.	ED	Account number appears on European Direct Debit Internal Negative File.
R	740	Match Failed	Fix	DB, MP, RC	DB – Unable to find a match for Debit authorization record – based on trace number, account number, and division number. MP – Unable to find a match for MoneyPak authorization record – based on division number, amount, confirmation ID and account number. RC – See <i>Appendix AA: RevolutionCard</i> .

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
R	741	Validation Failed	Fix	DB, RC	Debit – Unable to validate the Debit authorization record – based on amount, action code, and MOP. RC – Unable to validate the RevolutionCard authorization record – based on amount and action code.
R/D	750	Invalid Transit Routing Number	Fix	ECP, ED	ECP – ABA transit routing number is invalid, fails check digit. ED – Bank Sort Code is invalid.
R/D	751	Transit Routing Number Unknown	Fix	ECP, ED	Transit routing number not on list of current acceptable numbers.
R	752	Missing Name	Fix	ECP, ED	Pertains to deposit transactions only.
R	753	Invalid Account Type	Fix	ECP	Pertains to deposit transactions only.
R/D	754	Account Closed	Cust.	CC, ECP, ED, SV, PY	Bank account has been closed. For PayPal – the customer's PayPal account was closed/restricted.
R	755	No Account/Unable to Locate	Cust.	ECP	Does not match any account for the customer at the bank.
R	756	Account-Holder Deceased	Cust.	ECP, ED	Customer or accountholder has died.
R	757	Beneficiary Deceased	Cust.	ECP	Beneficiary on account has died.
R	758	Account Frozen	Cust.	ECP, ED, SV	Transaction posting to account prohibited.
R/D	759	Customer Opt-out	Cust.	ECP, ED, PY	Customer has refused to allow transaction. For PayPal – the customer's billing agreement was cancelled.
R/D	760	ACH Non-Participant	Cust.	ECP, ED	ECP – Banking institution does not accept ACH transactions. ED – Bank does not allow direct debit.
R	762	No Address	Cust.	ECP	Pertains to deposit transactions only.

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
R	763	Invalid Account Number	Cust.	ECP, ED, MP, SV	Account number is incorrect.
R	764	Authorization Revoked by Consumer	Cust.	ECP, ED	Customer has notified their bank not to accept these transactions.
R	765	Customer Advises Not Authorized	Cust.	ECP	Customer has not authorized bank to accept these transactions.
R	766	Invalid CECP Action Code	Fix	ECP	Canadian ECP only. Note: Invalid Action Code Valid Action Codes are: FPO start Refund Validate only Validate and Deposit
R/D	767	Invalid Account Number Format	Fix	ECP, ED	Formatting of account number is incorrect.
R/D	768	Bad Account Number Data	Fix	ECP, ED	Invalid characters in account number.
D	769	Non-Convertible Account	Cust	ECP	Account is ineligible for check conversion. Note: POP/ARC only
D	802	Positive ID	Voice	BML, CC	Issuer requires further information.
D	806	Restraint	Cust.	CC, SV	Card has been restricted.
D	811	Invalid Security Code	Fix	CC	American Express CID is incorrect.
D	813	Invalid PIN/User ID	Cust.	BML, CC, DB, RC	Invalid PIN or User ID. BML, CC – Invalid User ID Debit – Invalid PIN RC – Invalid PIN
D	825	No Account	Cust.	CC, SV	Account does not exist.
D	833	Invalid Merchant	Fix	BML, CC, DB, ED, RC	Service Establishment (SE) number is incorrect or Issuer does not allow this type of transaction. ED – merchant not set up at vendor
R/D	834	Invalid MOP / Unauthorized user	Cust.	All	R - Method of payment is invalid for the division .D – BML unauthorized user

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Response Type	Code	Name	Action	Payment Method	Comments
D	835	No Permission	Cust.	PY	Customer does not have permission to refund the transaction.
D	902	Process Unavailable	Resend/ Call/ Cust.	BML, CC, DB, ED, MP, RC, SV	System error/malfunction with Issuer. Notes: For Bill Me Later – Decline from the processor. For Debit and RevolutionCard – The link is down or setup issue; contact your Chase Paymentech Representative.
D	903	Invalid Expiration	Cust.	CC	Invalid or expired expiration date.
D	904	Invalid Effective	Cust./ Resend	BML, CC, PY	Card not active. Notes: For Bill Me Later – Account may not yet be fully active. For PayPal – action is required by the customer.
D	905	Stand In Rules	Resend	BML	Declined authorization using stand-in rules. Note: Authorization may be obtained when systems are available
D	910	PayPal Agreement has expired	Cust	PY	Customer's billing agreement has expired.
D	911	Funding Source to expire	Cust	PY	7-21 day notice that customer's funding source will expire.
D	912	Account/ Agreement Updated	Cust	PY	Customer's agreement description was updated.
D	913	Previous Agreement in Effect	Cust	PY	Customer cancelled upgrade to account; previous agreement in effect.
D	914	Buyer removed final funding source	Cust	PY	Customer removed final funding source from their account.

Continued on next page

APPENDIX A: RESPONSE REASON CODE DESCRIPTION/USAGE (Continued)

Auth Code Responses

The following Auth Code responses may be generated by Chase Paymentech to indicate the status of an authorized transaction based on your processing parameters.

Code	Description
notdep	Not deposited
rcycle	Not deposited – transaction sent to Chase Paymentech recycle program
sofdep	Deposited transaction with a soft decline
tntCxx	Test only (do not send in production)
tstxxx	Test only (do not send in production)

APPENDIX B: ADDRESS VERIFICATION

Introduction

The Visa, MasterCard, Diners, UK Domestic Maestro, Discover, and RevolutionCard Address Verification Service (AVS) and American Express Automated Address Verification (AAV) are intended to reduce the fraudulent use of credit cards for mail, telephone, and other card not present transactions.

Address Verification is available to U.S. issued cards including Visa, MasterCard, MasterCard Diners, Diners, Discover, American Express, and RevolutionCard card types.

International Address Verification is available to UK issued Visa, MasterCard, UK Domestic Maestro, and American Express cards, and Canadian issued Visa, MasterCard, and American Express cards.

International Address Verification is defined as the card Issuer and the merchant being from two different countries. For example, a card Issuer in the U.S. and a merchant in the UK, or a card Issuer in Canada and a merchant in the U.S. For Visa, these scenarios would receive any of the AVS Response Codes noted as "International". MasterCard and American Express do not differentiate between international and domestic AVS Response Codes.

If the card Issuer and the merchant are from the same country, it is considered "domestic" Address Verification, regardless of the country. For example, a card Issuer in Canada and a merchant in Canada. This scenario would receive any of the AVS Response Codes noted as "domestic."

Types of Address Records

Chase Paymentech supports two types of batch address records. One is formatted the other is not formatted.

The formatted address records are recommended for best AVS results.

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

Address Verification Process

Each verification process is executed by comparing the transmitted billing address with the billing address data that is kept on file for the cardholder. The Address Verification request is routed from the merchant through the Chase Paymentech system, directly to the specific credit card organization. The address information is then compared to the cardholder billing address on file.

The result of the Address Verification comparison is included in the authorization response message returned to the merchant. The Address Verification response is reflected as a two-character code (e.g., I3 or ID). In the Chase Paymentech address format, merchants may transmit either the zip/postal code only or multiple lines of address information. Chase Paymentech recommends Country Code be sent.

If the country code sent on the record is not "US", "CA", "GB", or "UK", Chase Paymentech will return AVS Response Code "N2"

If the country code is not sent on the record, Chase Paymentech will attempt to parse the zip/postal code in the following ways:

1. Attempt a U.S. zip code format.
2. Attempt a Canadian postal code format.
3. Attempt a GB/UK postal code format.
4. Return AVS Response Code "N2".

In each of the card organizations' address verification formats, the Address Verification fields consist of 29 bytes of data: 9 bytes for the 9 byte postal code and 20 bytes for the alphanumeric street address.

The number in the street address and any numeric street name must be sent in numeric form. For example, 123 FIRST STREET should be sent as 123 1ST STREET and ONE MAIN STREET as 1 MAIN STREET. Any apartment number associated with the address should follow directly after the street address on the same line.

For multiple street address lines, the line immediately preceding city, state, and postal code will be used. Suite and apartment numbers should be included on the street address line.

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

**Address
Verification
Process,
(Continued)**

For **Visa and MasterCard/MasterCard Diners**, MCCs that do not require AVS include:

- Government (9211, 9222, 9399)
- School (8211, 8220, 8299)
- Utility (4900)
- Insurance (5960, 6300)
- Cable and Other Pay TV (4899)
- Healthcare (4119, 5975, 5976, 7277, 8011, 8021, 8031, 8041, 8042, 8043, 8049, 8050, 8062, 8071, 8099)

AVS is not required for Bill Payment transactions unless transaction type is 5, 6, or 7.

Chase Paymentech recommends sending postal code as a minimum on all transactions.

For **American Express**:

To support full American Express AAV, the following records must be provided with online authorizations:

- “LN” – Formatted Bill To Name
- “AB” – Bill To Address
- “HN” – Formatted Ship To Name
- “AS” – Ship To Address

To support full American Express AAV, the following records must be provided with batch authorizations:

- “LN” – Formatted Bill To Name
- “LA” – Formatted Bill To Address
- “LT” – Formatted Bill To Telephone
- “HN” – Formatted Ship To Name
- “HA” – Formatted Ship To Address
- “HT” – Formatted Ship To Telephone

For American Express address verification, the street address, street name and telephone number fields cannot be populated with all zeros and/or slashes.

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

**Address
Verification
Process,
(Continued)**

For **RevolutionCard**:

It is highly recommended that the merchant send in AVS information. Revolution Money checks the ship to address against the billing address that is on file for fraud protection purposes.

For RevolutionCard - Card Not Present transactions, when Action Code = VF, street address and postal code must be sent or the transaction will reject with Response Reason Code 227 (Missing Companion Data).

Restricted Cards:

Restricted cards are RevolutionCard account numbers that can be used immediately once they are approved, but can only be used for online purchases at the merchant where the customer applied for the RevolutionCard. Once the customer receives a physical card and activates it, the account is no longer restricted and can be used at any merchant that accepts RevolutionCard.

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

AVS Response Codes	Response	Explanation
	N1	No address given with order
	N2	Bill-to address did not pass Chase Paymentech's edit checks (e.g., may be foreign)
	" "	AVS not performed (blanks returned)
	IG	AVS not performed by Issuer (International Issuer). Address information unavailable for the account number (i.e. gift card), the card Issuer does not support AVS, or card Issuer declined authorization and did not perform AVS.
	IU	AVS not performed by Issuer (Domestic Issuer). Address information unavailable for the account number (i.e. gift card), the card Issuer does not support AVS, or card Issuer declined authorization and did not perform AVS.
	ID	Issuer does not participate in AVS
	IE	Edit Error – AVS data is invalid
	IS	System unavailable or time-out
	IA	International street address and postal code match (International Only)
	IB	Street address match. Postal code not verified due to incompatible formats (both were sent)
	IC	Street address and postal code not verified due to incompatible format (both were sent)
	IP	Postal code match. Street address not verified due to incompatible formats (both were sent)
	A1	Cardholder name matches
	A3	Cardholder name, billing address and postal code match
	A4	Cardholder name and billing postal code match
	A7	Cardholder name and billing address match
	B3	Cardholder name incorrect, billing address and postal code match
	B4	Cardholder name incorrect, billing postal code matches
	B7	Cardholder name incorrect, billing address matches
	B8	Cardholder name, billing address and postal code are all incorrect

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

**AVS
Response
Codes,
(Continued)**

Response	Explanation		
R3	Restricted – Cardholder locale and postal code match		
R8	Restricted – Cardholder locale and/or postal code do not match		
	Zip/Postal	Plus-4	Locale
I1	Match	Match	Match
I2	Match	Match	No Match
I3	Match	No Match	Match
I4	Match	No Match	No Match
I5	No Match	Match	Match
I6	No Match	Match	No Match
I7	No Match	No Match	Match
I8	No Match	No Match	No Match

Notes: A1-B8 will only be returned for American Express transactions that use formatted address information.

R3 and R8 will only be returned for RevolutionCard transactions.

Shaded codes in the AVS table shown above are no longer provided by Visa. Visa eliminated the distinction between Zip and Zip+4 and consolidated the response codes previously provided.

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

AVS Response Key	Item	Definition
	ZIP/Postal	Zip/Postal code
	Plus-4	4 digit portion of a 9-digit U.S. zip code
	Locale	Street address, PO Box, or other local delivery destination
	A, B, I	Responses from the Issuer or Network
	N	Responses from Chase Paymentech
	Match	Information presented in the record field matches the information stored on the card Issuer's file
	No Match	Information presented in the record field does not match the information stored on the card Issuer's file.

Postal Code Format	U.S. Postal Code Format	Canadian Postal Code Format	United Kingdom Postal Code Format
	NNNNN NNNNN–NNNN	ANA NAN ANANAN	AN NAA ANA NAA ANN NAA AAN NAA AANN NAA AANA NAA

N = Numeric
A = Alpha

- Notes:** U.S. Address Verification is supported by:
 Visa, MasterCard, MasterCard Diners, American Express, Discover, Diners, GECC, and RevolutionCard.
- Canadian Address Verification is supported by:
 Visa, MasterCard, MasterCard Diners, and American Express.
- United Kingdom (UK/GB) Address Verification is supported by:
 Visa, MasterCard, UK Domestic Maestro, and American Express.

APPENDIX C: ERROR SCREENING

Bad Account Number Check

There are three common edits which catch the greatest majority of bad card numbers:

- MOD 10 check digit
- Credit card prefix check
- Credit card length validation

A discussion of these edits follows.

MOD 10 Check Digit

The MOD 10 check digit calculation validates the credit card by calculating the last digit of the card number from all the other numbers in the card.

The last digit of a credit card can be calculated based on a calculation performed upon all the digits preceding it. This operation is called a **MOD 10 check digit routine**.

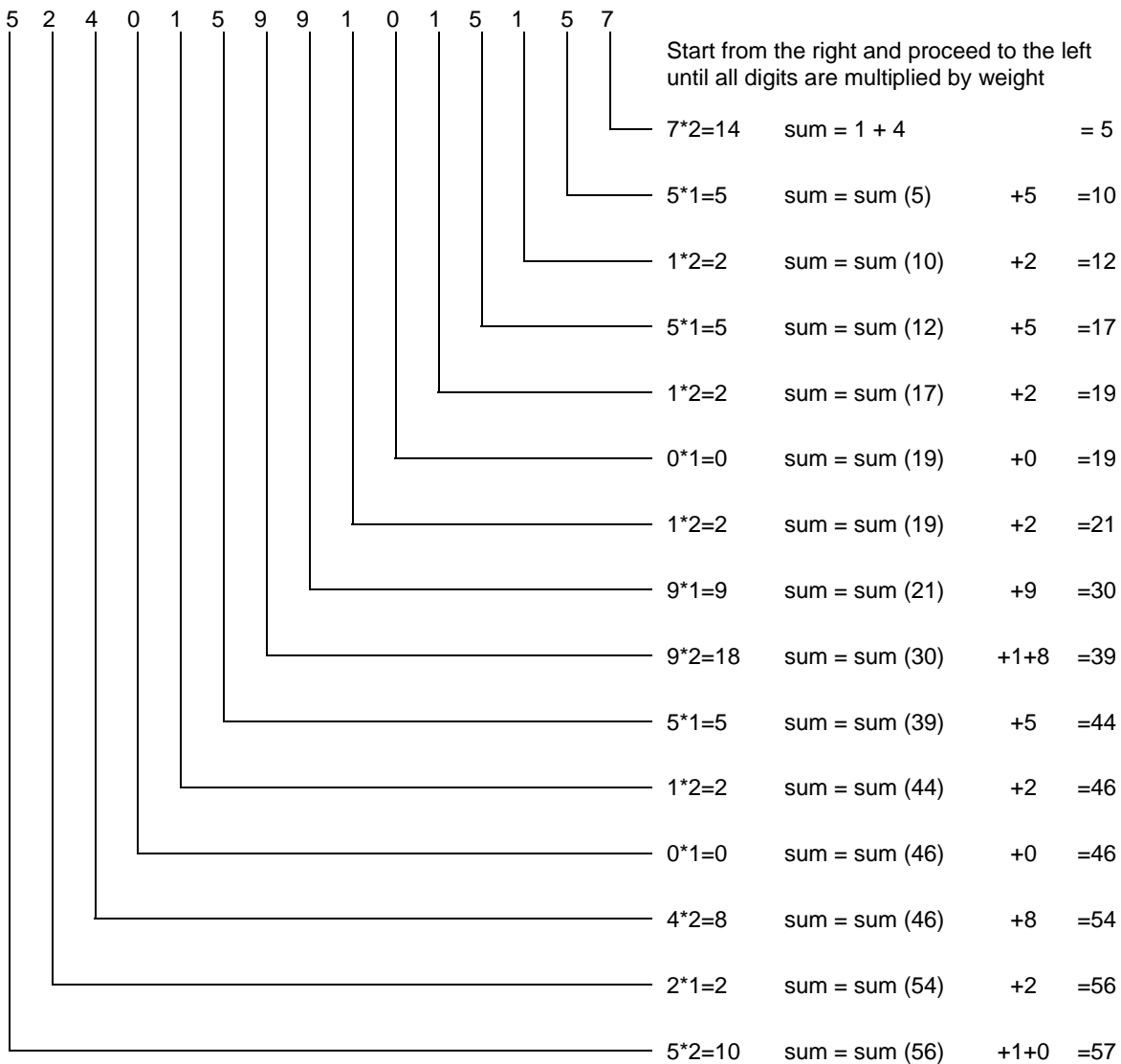
Continued on next page

APPENDIX C: ERROR SCREENING (Continued)

**MOD 10
Check Digit,
(Continued)**

The general idea of this calculation is as follows:

Example: Card number 5240159910151573



Remove the **check digit**, 3, which is already present in this example
 sum = 57
 sum MOD 10 → 57 MOD 10 = 7
 10 - 7 = 3
 check digit of 5240159910151573 is **3**.

Continued on next page

APPENDIX C: ERROR SCREENING (Continued)

MOD 10 Check Digit, (Continued)

The following routine is a check digit routine written in the 'C' programming language.

```
/* The operator for mod in 'C' is % */
long mod10 (card,card_len-1) /* module 10 check digit function */
char *card; /* credit card number */
short card_len /* card length */
{
register int count; /* a counter */
register int weight; /* weight to apply to digit being checked */
register int sum; /* sum of weights */
register int digit; /* digit being checked */
long mod;

weight=2;
sum=0;

/* compute the sum */
for (count = card_len - 1; count >=0; count = count -1)
{
digit = weight * (card[count] - '0');

/* add both the tens digit and the ones digit to the sum */
sum = sum + (digit / 10) + (digit % 10);

if (weight ==2)
weight = 1;
else
weight = 2;
}

/* subtract the ones digit of the sum from 10 and return the ones digit of that
result */

mod = (10 - sum%10) % 10;
return (mod)
}
```

Continued on next page

APPENDIX C: ERROR SCREENING (Continued)

Card Prefix Check

The prefix check is the comparison of the first few digits of each card number to a list of known prefixes.

The list of prefixes below is based on knowledge Chase Paymentech currently has and is subject to change.

Card Type	Prefix
American Express/Optima	37, 34
Beneficial Private Label	7
Bill Me Later	504990, 621993
Bill Me Later Private Label	621993
Bill Me Later Small Business Instant Credit	504990, 621993
Carte Blanche	389
Debit	Unknown
Diners Club	30, 36
Discover	35, 60, 62, 64, 65
Encryption	Unknown
Gift Card	603571
JCB	3528 – 3589
MasterCard	36, 51 – 55
MasterCard Diners	36
MoneyPak	Unknown
RevolutionCard	Unknown
Sears Private Label	504994
Switch/Solo (UK Maestro)	49, 56, 6* where * is any single digit
Visa/Delta	4

Note: If card prefix 36 is sent as Diners or MasterCard, Chase Paymentech will process and report the transaction as MasterCard Diners. MOP = MD will be returned in the reply record.

Continued on next page

APPENDIX C: ERROR SCREENING (Continued)

Account Number Length Check A validation is performed by verifying the number of bytes for each account number.

Card Type	Length
American Express/Optima	15
Beneficial Private Label	16
Bill Me Later	16
Bill Me Later Private Label	16
Bill Me Later Small Business Instant Credit	16
Carte Blanche	14
Debit	12 to 19
Diners Club	14
Discover	16
Encryption	15 to 19
European Direct Debit	Up to 16
Gift Card	19
JCB	16
MasterCard	14 (only for 36 prefix), 16
MasterCard Diners	14
MoneyPak	14 to 20
PayPal	17 or 19
RevolutionCard	16
Sears Private Label	16
Switch/Solo (UK Maestro)	16, 18, or 19
Visa/Delta	16

APPENDIX F: AUTHORIZATION REVERSALS

Introduction

The merchant-initiated authorization reversal transaction can be sent in a real-time or batch submission. The purpose of the authorization reversal is to free-up the accountholder's Open To Buy, which has been reserved by the original authorization. This is done at the Issuer's discretion.

Merchant-initiated authorization reversals have specific rules, edits, and response reason codes, for which details are provided in the sections below. Authorization reversals are reported in a separate section of the same reports as other authorizations.

How It Works

In order for the merchant to use Authorization Reversal functionality:

1. The original authorization must have been obtained through Chase Paymentech, or the transaction will decline with Response Reason Code 307 (Authorization Not Found).
2. A merchant must always reverse the full amount that was received in the authorization.
3. Authorization reversals should be sent to the same Chase Paymentech system as the original transaction.
4. Authorizations can be reversed via on-line for up to 3 days.
5. Authorizations can be reversed via batch for up to 7 – 10 days.
6. For batch authorization reversals, if extended authorization data is sent with the authorization reversal request, it will be ignored.
7. If the Response Date and/or Authorization Code are not provided, the transaction will reject with Response Reason Code 262 (Authorization Code/ Response Date Invalid).
8. A merchant should never send an authorization reversal for an authorization request for which they did not receive an approval or the transaction will decline with Response Reason Code 307 (Authorization Not Found).

Continued on next page

APPENDIX F: AUTHORIZATION REVERSALS (Continued)

**How It Works,
(Continued)**

9. The following criteria is used to find a matching authorization for the authorization reversal request:
- a. Account Number
 - b. Division Number
 - c. Authorization Code
 - d. Response Date
 - e. Amount
 - f. Order Number (Optional)

**Transaction
Types and
Requirements**

Online

Request:

1. On-line Processing Detail Record
 - a. Action Code = AR
 - b. Amount = approved, original, authorized amount
2. Format indicator
 - a. Prior Authorization (PA)
 - i. Response Date = approved, original, authorized date
 - ii. Authorization Code = approved, original, authorization code

Response:

1. On-line Processing Return Format Record

Batch

Request:

1. Detail Record
 - a. Action Code = AR
 - b. Amount = approved, original, authorized amount
 - c. Response Date = approved, original, authorized date
 - d. Authorization Code = approved, original, authorization code

Response:

1. "S" Record Output

Continued on next page

APPENDIX F: AUTHORIZATION REVERSALS (Continued)

Additional References See Appendix AA: RevolutionCard

Card Types / Supported Currencies Visa, MasterCard, MasterCard Diners, Discover, RevolutionCard – Card Not Present / All currencies.

Response Reason Codes See *Appendix A: Response Reason Code Description/Usage*

To Get Started Contact your Chase Paymentech representative.

APPENDIX G: PARTIAL AUTHORIZATION

Introduction Partial authorization functionality allows a merchant to receive an approval for a portion of the original amount when the full amount cannot be approved. Defaults for partial authorization handling are set at the division level. In some instances the defaults can be overridden at a transaction level. This appendix will provide the details for processing partial authorizations.

How It Works Default Set Up for the Merchant's Transaction Division

Default settings are entered into the Chase Paymentech processing system to manage the outcome of a partial authorization request at the transaction division level. If the merchant's transaction division is set to a default to either allow or not allow a partial authorization, the default can be overridden at the transaction level for MasterCard/MasterCard Diners, Visa, Discover and RevolutionCard. The division default cannot be overridden for American Express.

Conditional Deposits and Deposits

Partial authorizations cannot be performed on Conditional Deposit transactions.

If a Deposit transaction is re-authorized per Chase Paymentech's normal process for obtaining best interchange, a partial authorization will not be performed.

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

American Express

For **American Express** the following chart lists conditions and results when populating the Partial Redemption Indicator Flag.

Division Default	REQUEST		REPLY		
	Partial Redemption Indicator Flag	Amount of Authorization	Response Reason Code	Current Balance	Redemption Amount
1	N		263		
1	Y or not sent	Greater than available balance	100		Populated with approved, authorized, amount
1	Y or not sent	Less than or equal to available balance	100		
2	Y		263		
2	N or not sent	Greater than available balance	Decline	Populated with available balance	
2	N or not sent	Less than or equal to available balance	100		
3	Y or not sent	Greater than available balance	100		Populated with approved, authorized amount
3	N	Greater than available balance	Decline	Populated with correct available balance	
3	Y or not sent	Less than or equal to available balance	100		
3	N	Less than or equal to available balance	100		
0	Y or N		263		

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

American Express,
(Continued)

American Express Division Default Keys:

1	Do partial authorization and return redemption amount if authorized amount > available balance.
2	Decline if the amount is > available balance and return current balance (Partial Authorization not allowed).
3	Merchant is able to support the actions of division defaults '1' and '2'.
0	Division has not been certified with American Express for Partial Authorization

Note: If Partial Redemption Indicator Flag is not sent with the transaction the division default is used. If the division default is '3', a partial authorization is attempted.

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

Discover For **Discover** the following charts list the conditions and results when populating the Partial Redemption Indicator Flag.

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

Partial Redemption Indicator Flag / Division Default	Request		Reply		
	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
B / 1	Greater than or equal to available balance	Y	100	Populated with approved, authorized amount	Zero filled
Bal = \$70.00	\$80.00	\$20.00		\$70.00	\$0.00
B / 1	Less than available balance	Y Plus sale amount is greater than available balance	100	Populated with approved, authorized amount	Populated with approved, authorized amount
Bal = \$70.00	\$60.00	\$20.00		\$60.00	\$10.00
B / 1	Less than available balance	Y Plus sale amount is less than available balance	100		Populated with approved, authorized amount
Bal = \$70.00	\$40.00	\$20.00			\$20.00

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

**Discover,
(Continued)**

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

Partial Redemption Indicator Flag / Division Default	Request		Reply		
	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
B / 1	Less than available balance	Y Plus sale amount is equal to available balance	100		Populated with approved, authorized amount
Bal = \$70.00	\$50.00	\$20.00			\$20.00
B / 1	Less than or equal to available balance	N	100		
Bal = \$70.00	\$70.00				
B / 1	Greater than available balance	N	100	Populated with approved, authorized amount	
Bal = \$70.00	\$80.00			\$70.00	

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

**Discover,
(Continued)**

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for the transactions that are approved.

Partial Redemption Indicator Flag / Division Default	Request		Reply		
	S-Record Amount				
	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
C / 3	Greater than available balance	Y	Declined		Zero filled
Bal = \$70.00	\$80.00	\$20.00			\$0.00
C / 3	Equal to available balance	Y	100	Populated with approved, authorized amount	Zero filled
Bal = \$70.00	\$70.00	\$20.00		\$70.00	\$0.00
C / 3	Less than available balance	Y	100		Populated with approved, authorized amount
Bal = \$70.00	\$40.00	\$20.00			\$20.00
C / 3	Less than available balance	Y Plus sale amount is greater than available balance	100	Populated with approved, authorized amount	Populated with approved, authorized amount
Bal = \$70.00	\$60.00	\$20.00		\$60.00	\$10.00

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

**Discover,
(Continued)**

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

	Request		Reply		
	S-Record Amount				
Partial Redemption Indicator Flag / Division Default	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
C / 3	Less than or equal to available balance	N	100		
Bal = \$70.00	\$70.00				
C / 3	Greater than available balance	N	Declined		
Bal = \$70.00	\$80.00				

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

**Discover,
(Continued)**

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

Partial Redemption Indicator Flag / Division Default	Request		Reply		
	S-Record Amount				
	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
N / 0	Less than or equal to available balance	Y Plus Cash Back amount is less than or equal to available balance	100		Populated with approved, authorized amount
Bal = \$70.00	\$50.00	\$20.00			\$20.00
N / 0	Less than or equal to available balance	Y Plus Cash Back amount is greater than available balance	Declined		Zero filled
Bal = \$70.00	\$60.00	\$20.00			\$0.00
N / 0	Less than or equal to available balance	N	100		
Bal = \$70.00	\$70.00				
N / 0	Greater than available balance	N	Declined		
Bal = \$70.00	\$80.00				

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

**Discover,
(Continued)**

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

Partial Redemption Indicator Flag / Division Default	Request		Reply		
	S-Record Amount				
	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
Y / 2	Less than, greater than or equal to available balance	Y Plus sale amount is greater than available balance	100	Populated with approved, authorized amount	Zero filled
Bal = \$70.00	\$80.00	\$20.00		\$70.00	\$0.00
Y / 2	Less than available balance	Y Plus sale amount is less than or equal to available balance	100		Populated with approved, authorized amount
Bal = \$70.00	\$50.00	\$20.00			\$20.00
Y / 2	Less than, or equal to available balance	N	100		
Bal = \$70.00	\$70.00				
Y / 2	Greater than available balance	N	100	Populated with approved, authorized amount	
Bal = \$70.00	\$80.00			\$70.00	

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

**Discover,
(Continued)**

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

Partial Redemption Indicator Flag / Division Default	Request		Reply		
	Sale Amount	Cash Back Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
X / 4	Greater or equal to than available balance	Y	Decline		Zero filled
Bal = \$70.00	\$80.00	\$20.00			\$0.00
X / 4	Less than available balance	Y Plus sale amount is less than or equal to available balance	100		Populated with approved, authorized amount
Bal = \$70.00	\$50.00	\$20.00			\$20.00
X / 4	Less than available balance	Y Plus sale amount is greater than available balance	100	Populated with approved, authorized amount	Zero filled
Bal = \$70.00	\$60.00	\$20.00		\$60.00	\$0.00

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

**Discover,
(Continued)**

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

	Request		Reply		
	S-Record Amount				
Partial Redemption Indicator Flag / Division Default	Sale Amount	Cash Back Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
X / 4	Greater than available balance	N	Decline		
Bal = \$70.00	\$80.00				
X / 4	Less than or equal to available balance	N	100		
Bal = \$70.00	\$70.00				

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

Discover,
(Continued)

Discover Division Default Keys:

0	Merchant does not support partial authorization. Partial authorization not allowed for both sale amount and cash back amount.
1	Both sale amount and cash back may be partially approved. The sale amount must be fully approved before the cash back amount can be partially approved.
2	The sale amount can be partially approved but the cash back amount cannot be partially approved.
3	The sale amount must be fully approved before the cash back amount may be partially approved.
4	Merchant may support partial auth, but the sale amount must be fully approved before the cash back amount can be approved. Neither the sale amount nor the cash back amount can be partially approved.

Note: If Partial Redemption Indicator Flag is not sent with the transaction, the division default is used.

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

**MasterCard,
MasterCard
Diners and
Visa**

For **MasterCard, MasterCard Diners** and **Visa** the following chart lists the details when populating the Partial Redemption Indicator Flag.

Partial Redemption Indicator Flag/ Division Default	REQUEST	REPLY		
	Amount of Authorization	Response Reason Code	Current Balance	Redemption Amount
Y/1	Greater than available balance	100	May be populated with available balance (should be \$0.00)	Populated with approved, authorized amount
N/1	Greater than available balance	Decline		
Y/1	Less than or equal to available balance	100	May be populated with available balance	
N/1	Less than or equal to available balance	100		
Y/0	Greater than available balance	100	May be populated with available balance (should be \$0.00)	Populated with approved authorized amount
N/0	Greater than available balance	Decline		

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

**MasterCard,
MasterCard
Diners and
Visa,
(Continued)**

For **MasterCard, MasterCard Diners and Visa** the following chart lists the details when populating the Partial Redemption Indicator Flag.

Partial Redemption Indicator Flag/ Division Default	REQUEST	REPLY		
	Amount of Authorization	Response Reason Code	Current Balance	Redemption Amount
Y/0	Less than or equal to available balance	100	May be populated with available balance	
N/0	Less than or equal to available balance	100		

Division Default Keys MasterCard, MasterCard Diners and Visa:

1	Do partial authorization and return redemption amount if authorized amount > available balance.
0	Partial authorization not allowed – no return of current balance.

Notes: If Partial Redemption Indicator Flag is not sent with the transaction the division default is used.

If Visa, MasterCard, or MasterCard Diners returns a current balance on the authorization, it will be returned with the transaction response.

Fuel transactions (MCC = 5542) behave differently. Contact your Chase Paymentech representative for details.

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

MoneyPak For **MoneyPak** the following chart lists the details when populating the Partial Redemption Indicator Flag.

Partial Redemption Indicator Flag/ Division Default	REQUEST	REPLY		
	Amount of Authorization	Response Reason Code	Current Balance	Redemption Amount
Y/1	Greater than available balance	100		Populated with approved, authorized amount
N/1	Greater than available balance	Decline		
Y/1	Less than or equal to available balance	100		
N/1	Less than or equal to available balance	100		
Y/0	Greater than available balance	100		Populated with approved authorized amount
N/0	Greater than available balance	Decline		
Y/0	Less than or equal to available balance	100		
N/0	Less than or equal to available balance	100		

Division Default Keys MoneyPak:

1	Do partial authorization and return redemption amount if authorized amount > available balance.
0	Partial authorization not allowed – no return of current balance.

Note: If Partial Redemption Indicator Flag is not sent with the transaction the division default is used.

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

Revolution Card For **RevolutionCard** the following chart lists the details when populating the Partial Redemption Indicator Flag.

Partial Redemption Indicator Flag/ Division Default	REQUEST	REPLY		
	Amount of Authorization	Response Reason Code	Current Balance	Redemption Amount
Y/1	Greater than available balance	100		Populated with approved, authorized amount
N/1	Greater than available balance	Decline		
Y/1	Less than or equal to available balance	100		
N/1	Less than or equal to available balance	100		
Y/0	Greater than available balance	100		Populated with approved authorized amount
N/0	Greater than available balance	Decline		
Y/0	Less than or equal to available balance	100		
N/0	Less than or equal to available balance	100		

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

Revolution Card, (Continued) **Division Default Keys RevolutionCard:**

1	Do partial authorization and return redemption amount if authorized amount > available balance.
0	Partial authorization not allowed – no return of current balance.

Notes: If Partial Redemption Indicator Flag is not sent with the transaction the division default is used.

Fuel transactions (MCC = 5542) behave differently. Contact your Chase Paymentech representative for details.

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

Transaction Types and Requirements The following transaction requirements describe authorizations for Credit Card transactions.

Online

Request:

1. Online Processing Detail Record
 - a. Action Code = AU
2. Format indicator
 - a. Partial Authorization (PB)

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
 - a. Partial Authorization (PB) (Optional)

Batch

Request:

1. Detail Record
 - a. Action Code = AU
2. Product Record
 - a. Partial Authorization (PPB001)

Response:

1. "S" Record Output
2. Product Record
 - a. Partial Authorization (PPB001) (Optional)

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

**Transaction
Types and
Requirements,
(Continued)**

The following transaction requirements define MoneyPak transactions.

Online

Request:

1. Online Processing Detail Record
 - a. Action Code = PA
 - b. MOP = MP
2. Format Indicators
 - a. Partial Authorization (PB)
 - b. MoneyPak (MP)

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
 - a. Partial Authorization (PB) (Optional)
 - b. MoneyPak (MP) (Optional)

Batch

Request:

1. Detail Record
 - a. Action Code = PA
2. Extension Record
 - a. MoneyPak (EMP001) (Optional)
3. Product Record
 - a. Partial Authorization (PPB001)

Response:

1. "S" Record Output
2. Extension Record
 - a. MoneyPak (EMP001) (Optional)
3. Product Record
 - a. Partial Authorization (PPB001) (Optional)

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

Transaction Types and Requirements, (Continued)

The following transaction requirements describe authorizations for RevolutionCard transactions.

Online

Request:

1. Online Processing Detail Record
 - a. Action Code = AU (Card Not Present) or PA (Card Present)
 - b. MOP = RC
2. Format Indicators
 - a. Partial Authorization (PB) (Optional)
 - b. RevolutionCard (RC)
 - c. Retail (RE) or Retail 3 (R3) (Card Present)

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
 - a. Partial Authorization (PB) (Optional)
 - b. RevolutionCard (RC)

Batch

Request:

1. Detail Record
 - a. Action Code = AU (Card Not Present)
2. Extension Record
 - a. RevolutionCard (ERC001) (Optional if Transaction Type = 2)
3. Product Record
 - a. Partial Authorization (PPB001) (Optional)

Response:

1. "S" Record Output
2. Extension Record
 - a. RevolutionCard (ERC001)
3. Product Record
 - a. Partial Authorization (PPB001) (Optional)

Continued on next page

APPENDIX G: PARTIAL AUTHORIZATION (Continued)

Card Types / Supported Currencies American Express, Visa, MasterCard, MasterCard Diners, Discover, MoneyPak, RevolutionCard / All currencies.

Response Reason Codes See *Appendix A: Response Reason Code Description/Usage*

To Get Started Contact your Chase Paymentech representative.

APPENDIX AA: REVOLUTIONCARD

Introduction RevolutionCard is a credit card that can be used in both card present and card not present environments. The card contains the added security feature of a required PIN to limit the potential for fraud. Revolution Money is the issuing host and maintains the associated lines of credit with financial institutions. The card does not have a name or account number embossed on the front of the plastic.

Card Present - How it Works RevolutionCard is a credit card where the customer enters a secure PIN after selecting the Debit option on the point of sale (POS) terminal. When the card is swiped at the point of sale, the customer must key in their Personal Identification Number (PIN). The PIN pad encrypts the PIN before it is sent for processing.

Merchants must have their POS terminal configured with a PIN pad that has been injected with payment encryption keys by a TG-3 compliant and Chase Paymentech approved Encryption Service Organization (ESO).

Transaction Type must equal R or the transaction will reject with Response Reason Code 253 (Invalid Transaction Type).

Swipe data is required or the transaction will reject with Response Reason Code 227 (Missing Companion Data).

If Track 2 data is not sent, the transaction will reject with Response Reason Code 225 (Invalid Field Data).

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

**Card Present
Transaction
Types**

The following charts list the transaction types that can be sent in an online or batch transaction.

Transaction Types – Online

Action Code	Method of Payment	Valid Transaction Types Note: All non-valid transaction types will reject with Response Reason Code 253 (Invalid Transaction Type).
PA (Purchase Authorization)	RC (RevolutionCard)	R – Retail Indicator
PR (Purchase Authorization Reversal)	RC (RevolutionCard)	R – Retail Indicator
RA (Refund Authorization)	RC (RevolutionCard)	R – Retail Indicator
DR (Refund Authorization Reversal)	RC (RevolutionCard)	R – Retail Indicator

Transaction Types - Batch

Action Code	Method of Payment	Valid Transaction Types Note: All non-valid transaction types will reject with Response Reason Code 253 (Invalid Transaction Type).
DP (Deposit)	RC (RevolutionCard)	R – Retail Indicator
RF (Refund)	RC (RevolutionCard)	R – Retail Indicator

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Present Transaction Matching Criteria

The following chart identifies the duplicate purchase authorization and refund authorization detection processes.

Matching for Purchase Authorization (PA) and Refund Authorization (RA) uses Account Number, Amount, Division Number, and Order Number

Processing Mode	Matching Result	Action Taken
Online	No Match Found	Transaction is sent to Revolution Money for authorization.
Online	Match Found	Response Reason Code 109 (Previously Processed Transaction) is returned. Transaction is not re-authorized with Revolution Money.

The following chart identifies the matching process for purchase authorization reversals and refund authorization reversals.

Matching for Purchase Authorization (PA) to Purchase Authorization Reversal (PR) and Refund Authorization (RA) to Refund Authorization Reversal (DR) uses Account Number, Amount, Division Number, and Order Number

Processing Mode	Matching Result	Action Taken
Online	No Match Found	Response Reason Code 740 (Match Failed) is returned. Transaction is not reversed.
Online	Match Found	Transaction sent to Revolution Money for reversal.

The following charts identify the matching and validation processes. Both matching and validation must be successful for a transaction to deposit or refund.

Matching Purchase Authorizations (PA) to Deposit (DP) and Refund Authorizations (RA) to Refunds (RF) uses Trace Number, Account Number, and Division Number.

Processing Mode	Matching Result	Action Taken
Batch	No Match Found	Response Reason Code 740 (Match Failed) is returned. Transaction is not deposited.
Batch	Match Found	Check for validation.

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

**Card Present
Transaction
Matching
Criteria,
(Continued)**

Validation for Purchase Authorizations (PA) to Deposit (DP) and Refund Authorizations (RA) to Refunds (RF) uses Trace Number, Account Number, Division Number, Amount, and complimentary Action Code.

Processing Mode	Matching Result	Action Taken
Batch	No Match Found	Response Reason Code 741 (Validation Failed) is returned. Transaction is not deposited.
Batch	Match Found	Response Reason Code 100 (Approved) is returned. Transaction is deposited.

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Present Transaction Types and Requirements

Purchase Authorization verifies customer's open-to-buy and if the funds are available, debits the customer's account.

Online

Request:

1. Online Processing Detail Record
 - a. Action Code = PA
 - b. MOP = RC
 - c. Transaction Type = R
2. Format Indicators
 - a. Partial Authorization (PB) (Optional)
 - b. RevolutionCard (RC)
 - i. Encrypted PIN Number
 - ii. PIN Key Sequence Number (KSN)
 - c. Retail (RE) or Retail 3 (R3)
 - i. Track Indicator = 2
 - ii. Swipe Data
 - d. Cash Back (CO) (Optional)

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
 - a. RevolutionCard (RC)
 - b. Partial Authorization (PB) (Optional)

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Present Transaction Types and Requirements, (Continued)

Purchase Authorization Reversal reverses the previously attempted or approved purchase authorization.

Online

Request:

1. Online Processing Detail Record
 - a. Action Code = PR
 - b. MOP = RC
 - c. Amount = Original, authorized amount.
 - d. Transaction Type = R
2. Format Indicators
 - a. RevolutionCard (RC)
 - i. Encrypted PIN Number
 - ii. PIN Key Sequence Number (KSN)
 - b. Retail (RE) or Retail 3 (R3)
 - i. Track Indicator = 2
 - ii. Swipe Data

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
 - a. RevolutionCard (RC)

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

**Card Present
Transaction
Types and
Requirements,
(Continued)**

Deposit funds the merchant for the previously approved purchase authorization.

Batch

Request:

1. Detail Record
 - a. Action Code = DP
 - b. MOP = RC
 - c. Transaction Type = R
2. Extension Record:
 - a. RevolutionCard (ERC001)
 - i. Trace Number

Response:

1. "S" Record Output

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Present Transaction Types and Requirements, (Continued)

Refund Authorization returns funds to the customer for a previously approved debit purchase authorization.

Online

Request:

1. Online Processing Detail Record
 - a. Action Code = RA
 - b. MOP = RC
 - c. Transaction Type = R
2. Format Indicators
 - a. RevolutionCard (RC)
 - i. Encrypted PIN Number
 - ii. PIN Key Sequence Number (KSN)
 - b. Retail (RE) or Retail 3 (R3)
 - i. Track Indicator = 2
 - ii. Swipe Data

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
 - a. RevolutionCard (RC)

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Present Transaction Types and Requirements, (Continued)

Refund Authorization Reversal reverses the previously attempted or approved refund authorization.

Online

Request:

1. Online Processing Detail Record
 - a. Action Code = DR
 - b. MOP = RC
 - c. Amount = Original, refund authorization amount.
 - d. Transaction Type = R
2. Format Indicators
 - a. RevolutionCard (RC)
 - i. Encrypted PIN Number
 - ii. PIN Key Sequence Number (KSN)
 - b. Retail (RE) or Retail 3 (R3)
 - i. Track Indicator = 2
 - ii. Swipe Data

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
 - a. RevolutionCard (RC)

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Present Transaction Types and Requirements, (Continued)

Refund removes the funds from the merchant for the previously approved refund authorization.

Batch

Request:

1. Detail Record
 - a. Action Code = RF
 - b. MOP = RC
 - c. Transaction Type = R
2. Extension Record:
 - a. RevolutionCard (ERC001)
 - i. Trace Number

Response:

1. "S" Record Output

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

**Card Not Present –
How it Works**

RevolutionCard functions as a credit card for card not present transactions. The accountholder is required to obtain a temporary one time Token ID from Revolution Money before a purchase can be made.

At the time of order entry, the accountholder must provide the account number and the temporary one time Token ID.

The temporary one time Token ID is not required for recurring transactions.

Transaction Type must equal 1, 2, 3, 4, 7, or 8 or the transaction will reject with Response Reason Code 253 (Invalid Transaction Type).

AVS is supported for card not present transactions when the Action Code = VF and Amount = zero and shipping address information is provided. Successful account verification transactions will return Response Reason Code 104 (No Reason to Decline).

At authorization time, RevolutionMoney compares billing address to shipping address for fraud protection.

**Authorization Reversals:
How It Works**

In order for the merchant to use Authorization Reversal functionality:

1. The original authorization amount must have been obtained through Chase Paymentech, or the transaction will decline with Response Reason Code 740 (Match Failed).
2. A merchant must always reverse the original authorization amount that was submitted.
3. Authorization reversals should be sent to the same Chase Paymentech system as the original transaction.
4. Authorizations can be reversed via on-line for up to 3 days.
5. Authorizations can be reversed via batch for up to 7 – 10 days.
6. For batch authorization reversals, if extended authorization data is sent with the authorization reversal request, it will be ignored.
7. The following criteria is used to find a matching authorization for the authorization reversal request:
 - a. Account Number
 - b. Division Number
 - c. Amount

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Not Present Transaction Types

The following charts list the transaction types that can be sent in an online or batch transaction.

Transaction Types – Online

Action Code	Method of Payment	Valid Transaction Types
		Note: All non-valid transaction types will reject with Response Reason Code 253 (Invalid Transaction Type).
AU (Authorization)	RC (RevolutionCard)	1 – MOTO (Telephone Order Only) 2 – Recurring 3 – Installment 4 – Deferred 7 – Internet 8 – Non-secure Internet
AR (Authorization Reversal)	RC (RevolutionCard)	1 – MOTO (Telephone Order Only) 2 – Recurring 3 – Installment 4 – Deferred 7 – Internet 8 – Non-secure Internet
VF (Account Verification)	RC (RevolutionCard)	1 – MOTO (Telephone Order Only) 2 – Recurring 3 – Installment 4 – Deferred 7 – Internet 8 – Non-secure Internet

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Not Present Transaction Types, (Continued)

Transaction Types - Batch

Action Code	Method of Payment	Valid Transaction Types
		Note: All non-valid transaction types will reject with Response Reason Code 253 (Invalid Transaction Type).
AU (Authorization)	RC (RevolutionCard)	1 – MOTO (Telephone Order Only) 2 – Recurring 3 – Installment 4 – Deferred 7 – Internet 8 – Non-secure Internet
AR (Authorization Reversal)	RC (RevolutionCard)	1 – MOTO (Telephone Order Only) 2 – Recurring 3 – Installment 4 – Deferred 7 – Internet 8 – Non-secure Internet
DP (Deposit)	RC (RevolutionCard)	1 – MOTO (Telephone Order Only) 2 – Recurring 3 – Installment 4 – Deferred 7 – Internet 8 – Non-secure Internet
DC (Conditional Deposit)	RC (RevolutionCard)	1 – MOTO (Telephone Order Only) 2 – Recurring 3 – Installment 4 – Deferred 7 – Internet 8 – Non-secure Internet
RF (Refund)	RC (RevolutionCard)	1 – MOTO (Telephone Order Only) 2 – Recurring 3 – Installment 4 – Deferred 7 – Internet 8 – Non-secure Internet
VF (Account Verification)	RC (RevolutionCard)	1 – MOTO (Telephone Order Only) 2 – Recurring 3 – Installment 4 – Deferred 7 – Internet 8 – Non-secure Internet

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Not Present Transaction Matching Criteria

The following charts identify the duplicate authorization detection processes.

Matching for Authorization (AU) uses Account Number, Amount, Division Number, and Order Number

Processing Mode	Matching Result	Action Taken
Online and Batch	No Match Found	Transaction is sent to Revolution Money for authorization.
Online and Batch	Match Found	Response Reason Code 109 (Previously Processed Transaction) is returned. Transaction is not re-authorized with Revolution Money.

Matching for Conditional Deposit (DC) uses Account Number, Amount, Division Number, and Order Number

Processing Mode	Matching Result	Action Taken
Batch	No Match Found	Transaction is sent to Revolution Money for authorization.
Batch	Match Found	Response Reason Code 100 (Approved) is returned. Transaction is not re-authorized with Revolution Money and the transaction is deposited.

The following chart identifies the matching process for authorization reversals.

Matching for Authorization (AU) to Authorization Reversal (AR) uses Account Number, Amount, Division Number, and Order Number

Processing Mode	Matching Result	Action Taken
Online	No Match Found	Response Reason Code 740 (Match Failed) is returned. Transaction is not reversed.
Online	Match Found	Transaction sent to Revolution Money for reversal.

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Not Present Transaction Matching Criteria,
(Continued)

The following charts identify the matching and validation processes. Both matching and validation must be successful for a transaction to process.

Matching Authorizations (AU) to Deposit (DP) uses Trace Number, Account Number, and Division Number.

Processing Mode	Matching Result	Action Taken
Batch	No Match Found	Response Reason Code 740 (Match Failed) is returned. Transaction is not deposited.
Batch	Match Found	Check for validation.

Validation for Authorizations (AU) to Deposit (DP) uses Trace Number, Account Number, Division Number, Amount, and complimentary Action Code.

Processing Mode	Matching Result	Action Taken
Batch	No Match Found	Response Reason Code 741 (Validation Failed) is returned. Transaction is not deposited.
Batch	Match Found	Response Reason Code 100 (Approved) is returned. Transaction is deposited.

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Not Present Transaction Types and Requirements

Authorization verifies and holds the customer's open-to-buy.

Online

Request:

1. Online Processing Detail Record
 - a. Action Code = AU
 - b. MOP = RC
 - c. Transaction Type = 1, 2, 3, 4, 7, 8

2. Format Indicators:

- a. Ship to Address (AS) (Optional)

Note: It is highly recommended that merchants send this information for fraud protection.

- b. Partial Authorization (PB) (Optional)
- c. RevolutionCard (RC)

- i. One Time Token ID

Note: A token is required when Transaction Type does not = 2.

Response:

1. Online Processing Return Format Record
2. Reply Format Indicators:
 - a. Partial Authorization (PB) (Optional)
 - b. RevolutionCard (RC)

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

**Card Not
Present
Transaction
Types and
Requirements,
(Continued)**

Authorization, (Continued)

Batch

Request:

1. Detail Record
 - a. Action Code = AU
 - b. MOP = RC
 - c. Transaction Type = 1, 2, 3, 4, 7, 8

2. Extension Record:

- a. RevolutionCard (ERC001)
 - i. One Time Token ID

Note: A token is required when Transaction Type does not = 2.

3. Product Record:

- a. Partial Authorization (PPB001) (Optional)

4. Formatted Address Record:

- a. Ship To Address (HA) (Optional)

5. Address Record:

- a. Ship To Address (S) (Optional)

Note: It is highly recommended that merchants send either the Ship To Address (HA) Formatted Address Record or the Ship To Address (S) Address Record for fraud protection.

Response:

1. "S" Record Output
2. Extension Record
 - a. RevolutionCard (ERC001)
3. Product Record:
 - a. Partial Authorization (PPB001) (Optional)

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

**Card Not
Present
Transaction
Types and
Requirements,
(Continued)**

Authorization Reversal reverses the previously approved authorization.

Online

Request:

1. Online Processing Detail Record
 - a. Action Code = AR
 - b. MOP = RC
 - c. Amount = Original amount submitted for authorization.
 - d. Transaction Type = 1, 2, 3, 4, 7, 8
2. Format Indicators
 - a. Prior Authorization (PA) (Optional)
 - i. Response Date = approved, original, authorized date
 - ii. Authorization Code = approved, original, authorization code
 - b. RevolutionCard (RC) (Optional)

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
 - a. RevolutionCard (RC)

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Not
Present
Transaction
Types and
Requirements,
(Continued)

Authorization Reversal, (Continued)

Batch

Request:

1. Detail Record
 - a. Action Code = AR
 - b. MOP = RC
 - c. Amount = Original amount submitted for authorization.
 - d. Response Date = approved, original, authorized date (Optional)
 - e. Authorization Code = approved, original, authorization code (Optional)
 - f. Transaction Type = 1, 2, 3, 4, 7, 8 (Optional)
2. Extension Record:
 - a. RevolutionCard (ERC001) (Optional)

Response:

1. "S" Record Output
2. Extension Record
 - a. RevolutionCard (ERC001)

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Not Present Transaction Types and Requirements,
(Continued)

Deposits a transaction utilizing normal processing methods.

Batch

Request:

1. Detail Record
 - a. Action Code = DP
 - b. MOP = RC
 - c. Transaction Type = 1, 2, 3, 4, 7, 8
2. Extension Record:
 - a. RevolutionCard (ERC001)
 - i. Trace Number

Response:

1. "S" Record Output
2. Extension Record
 - a. RevolutionCard (ERC001)

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

Card Not Present Transaction Types and Requirements, (Continued)

Conditional Deposit verifies customer's open-to-buy and if the funds are available, debits the customer's account and funds the merchant.

Batch

Request:

1. Detail Record
 - a. Action Code = DC
 - b. MOP = RC
 - c. Transaction Type = 1, 2, 3, 4, 7, 8

2. Extension Record:

- a. RevolutionCard (ERC001)
 - i. One Time Token ID

Note: A token is required when Transaction Type does not = 2.

3. Product Record:

- a. Partial Authorization (PPB001) (Optional)

4. Formatted Address Record:

- a. Ship To Address (HA) (Optional)

5. Address Record:

- a. Ship To Address (S) (Optional)

Note: It is highly recommended that merchants send either the Ship To Address (HA) Formatted Address Record or the Ship To Address (S) Address Record for fraud protection.

Response:

1. "S" Record Output
2. Extension Record:
 - a. RevolutionCard (ERC001)
3. Product Record:
 - a. Partial Authorization (PPB001) (Optional)

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

**Card Not
Present
Transaction
Types and
Requirements,
(Continued)**

Refund returns funds to the customer's account.

Batch

Request:

1. Detail Record
 - a. Action Code = RF
 - b. MOP = RC
 - c. Transaction Type = 1, 2, 3, 4, 7, 8
2. Extension Record:
 - a. RevolutionCard (ERC001)
 - i. Transaction ID

Response:

1. "S" Record Output
2. Extension Record:
 - a. RevolutionCard (ERC001)

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

**Card Not
Present
Transaction
Types and
Requirements,
(Continued)**

Verification validates the account and the shipping address.

Online

Request:

1. Online Processing Detail Record
 - a. Action Code = VF
 - b. MOP = RC
 - c. Amount = all zeroes
 - d. Transaction Type = 1, 2, 3, 4, 7, 8
2. Format Indicator:
 - a. Ship to Address (AS)

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
 - a. RevolutionCard (RC)

Batch

Request:

1. Detail Record
 - a. Action Code = VF
 - b. MOP = RC
 - c. Amount = all zeroes
 - d. Transaction Type = 1, 2, 3, 4, 7, 8
2. Formatted Address Record:
 - a. Ship to Address (HA) (Optional)
3. Address Record:
 - a. Ship to Address (S) (Optional)

Note: Merchants must send either the Ship To Address (HA) Formatted Address Record or the Ship To Address (S) Address Record, but not both.

Response:

1. "S" Record Output
 2. Extension Record
 - a. RevolutionCard (ERC001)
-

Continued on next page

APPENDIX AA: REVOLUTIONCARD (Continued)

**Card Types /
Supported
Currencies** RevolutionCard/U.S. currency

**Response
Reason Codes** See Appendix A: Response Reason Code Description/Usage

To Get Started Contact your Chase Paymentech Representative.

END OF THE TECHNICAL SPECIFICATION

Online Processing Versions 7.0 – 7.4 Revision 3.0 Addendum In Support of RevolutionCard Rev. 2

© Chase Paymentech 2009 – All rights reserved

03/30/2009