

# Technical Specification

120-Byte Batch Processing Format Specification  
Version 3.0.0 Revision 5.0  
Addendum in Support of October 2010 Bank Card Regulations  
Rev. 2  
October 15, 2010



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***120–Byte Processing Format Specification  
Version 3.0.0 Revision 5.0  
Addendum in Support of October 2010 Bank Card  
Regulations***

***Rev. 2***

***October 15, 2010***



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The following updates, additions, corrections have been incorporated in  
**120-Byte Batch Processing Format Specification Version 3.0.0 Revision 5.0**  
**Addendum In Support of October 2010 Bank Card Regulations Rev. 2**

Page No(s)	Action	Description of Change
<b>Product Records</b>		
8	Updated	Notes in the Sales Tax Amount field in the Product Record: Procurement Level 2 and Line Item Level Data – Record #1 (PPC001) to clarify that certain merchants are not required to send in Sales Tax Amount.
<b>Appendix V: Level 2 and Line Item Level Data</b>		
21	Updated	Appendix to create a new section detailing specific MCCs that are not required to submit a sales tax amount.

The following updates, additions, corrections have been incorporated in  
**120-Byte Batch Processing Format Specification Version 3.0.0 Revision 5.0**  
**Addendum In Support of October 2010 Bank Card Regulations Rev. 1**

Page No(s)	Action	Description of Change
<b>Extension Records:</b>		
1	Updated	PAN Entry Mode field in the Discover Extension Record to remove the value of 08 – Card Present magstripe is defective and cannot be read.
2	Updated	PAN Entry Mode field in the Discover Diners Extension Record to remove the value of 08 – Card Present magstripe is defective and cannot be read.
3	Updated	PAN Entry Mode field in the JCB Extension Record to remove the value of 08 – Card Present magstripe is defective and cannot be read.
5	Updated	MasterCard Authentication Extension Record to include a record note indicating that MC is now a supported MOP in the MARP functionality for European merchants.
<b>Product Records:</b>		
6	Updated	Notes in Fuel Purchase Type field to include reference to Level 3 data being sent to qualify for best possible interchange rate.
<b>Appendix I: MasterCard SecureCode</b>		
9-10	Updated	Appendix to show that MasterCard is now a supported MOP in the MARP functionality.
12	Updated	Supported Currency to include MasterCard.

# TECHNICAL SPECIFICATION 120-BYTE BATCH PROCESSING FORMAT SPECIFICATION

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**RECORD LAYOUTS  
(Continued)**

**Extension Record: Discover Diners**

1	2	3	4	5	6	7
123456789012345678901234567890123456789012345678901234567890123456789	0123456789012345678901234567890123456789012345678901234567890123456789	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
E	DD	001	0	00000000200020080324101000		

8	9	10	11	12
012345678901234567890123456789012345678901234567890	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA			

Position	Length	Data Type	Field Name	Comments
1	1	A	Extension Record Identifier	“E” Constant
2,3	2	A	Extension Record MOP Type	“DD” Constant
4,6	3	N	Extension Record Sequence Number	“001” Constant
21,22	2	N	PAN Entry Mode	Indicates the method by which the account number was captured by the merchant. Valid values: 00 – Unknown 01 – Manual (Key Entered) 02 – Magnetic Stripe 03 – Bar Code 04 – Optical Character Reader (OCR) 05 – Integrated Circuit Card Reader 07 – Electronic Commerce 81 – Radio Frequency Identification Indicator 82 – Mobile Commerce (mCommerce) 90 – Voice Authorizations 91 – Voice Response Unit (VRU) 92 – Batch Authorizations 93 – Batch Authorization Cash Access 94 – Biometrics

# RECORD LAYOUTS (Continued)

**Extension Record: Japan Credit Bureau (JCB)**

1	2	3	4	5	6	7
123456789012345678901234567890123456789012345678901234567890123456789	0123456789012345678901234567890123456789012345678901234567890123456789	0123456789012345678901234567890123456789012345678901234567890123456789	0123456789012345678901234567890123456789012345678901234567890123456789	0123456789012345678901234567890123456789012345678901234567890123456789	0123456789012345678901234567890123456789012345678901234567890123456789	0123456789012345678901234567890123456789012345678901234567890123456789
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA						
EJC001123456093000000000 000000 0			20080324101000			

8	9	10	11	12
01234567890123456789012345678901234567890123456789012345678901234567890	01234567890123456789012345678901234567890123456789012345678901234567890	01234567890123456789012345678901234567890123456789012345678901234567890	01234567890123456789012345678901234567890123456789012345678901234567890	01234567890123456789012345678901234567890123456789012345678901234567890
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA				
┘				

Position	Length	Data Type	Field Name	Comments
1	1	A	Extension Record Identifier	"E" Constant
2,3	2	A	Extension Record MOP Type	"JC" Constant
4,6	3	N	Extension Record Sequence Number	"001" Constant
21,22	2	N	PAN Entry Mode	Indicates the method by which the account number was captured by the merchant. Valid values: 00 – Unknown 01 – Manual (Key Entered) 02 – Magnetic Stripe 03 – Bar Code 04 – Optical Character Reader (OCR) 05 – Integrated Circuit Card Reader 07 – Electronic Commerce 81 – Radio Frequency Identification Indicator 82 – Mobile Commerce (mCommerce) 90 – Voice Authorizations 91 – Voice Response Unit (VRU) 92 – Batch Authorizations 93 – Batch Authorization Cash Access 94 – Biometrics

# RECORD LAYOUTS (Continued)

**Extension Record: MasterCard Authentication**

```

      1      2      3      4      5      6      7      8      12
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0
AAANNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
EMC002godlOEAxmL4wH7108KtV0kAQASXRx1o                                     J
  
```

Position	Length	Data Type	Field Name	Comments
1	1	A	Extension Record Identifier	"E" Constant – Specifies this record as an extension record of the Chase Paymentech standard format.
2,3	2	A	Extension Record MOP Type	"MC" Constant
4,6	3	N	Extension Record Sequence Number	"002" Constant
7,38	32	A	Accountholder Authentication Value (AAV)	<p>Unique transaction token generated by the Issuer and presented to the merchant each time an accountholder conducts an electronic transaction using MasterCard SecureCode.</p> <p>Left justified/blank filled</p> <p><b>Notes:</b> Must be sent in Base 64 Encoding or the transaction rejects with Response Reason Code 245 (Missing or Invalid Secure Payment Data).</p> <p>This is the same format used by MasterCard when returning the AAV data to the merchant during the authentication step.</p> <p><b>DO NOT MANIPULATE</b> this value in any way.</p>
39,120	82	A	Reserved	Blanks

*Continued on next page*



## RECORD LAYOUTS (Continued)

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### Extension Record: MasterCard Authentication, (Continued)

**Notes:** This record can only be sent when MOP = MC or the transaction rejects with Response Reason Code 225 (Invalid Field Data).

See *Appendix I: MasterCard SecureCode* for product information.

Division level flag must be set in order to process MasterCard Authentication transactions, or the transaction rejects with Response Reason Code 246 (Merchant Not MasterCard SecureCode Enabled).

When using this record, the Transaction Type field should be populated with the ECI value that the merchant received back from the merchant plug-in software.

If a European merchant is participating in the Maestro Advanced Registration Program (MARP), and chooses to use static AAV, the Transaction Type field should be populated with a "5."

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**RECORD LAYOUTS  
(Continued)**

**Product Record: Fuel**

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0								
AAANNNNNNANAAAAAAAAAAAAAAAAAAAAAAAAANNNNNNNNNNNNNNNNNNNNNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA								
PFU0011345103100100193901012560000000000243500000000100000000000000								J

Position	Length	Data Type	Field Name	Comments
1	1	A	Product Record Identifier	“P” Constant – Specifies this record as an extension record of the Chase Paymentech standard format.
2,3	2	A	Product Record Type	“FU” Constant
4,6	3	N	Product Record Sequence Number	“001” Constant
13	1	N	Fuel Purchase Type	Type of purchase. Valid values: 1– Fuel Purchase 2– Non-Fuel Purchase 3– Fuel and Non-Fuel Purchase  <b>Notes:</b> If this field = 2, the remainder of this record must be blank, or the transaction rejects with Response Reason Code 248 (Blanks Not Passed in Reserved Field).  For MasterCard transactions, if this field = 2, Level 3 line item data must be sent or the transaction does not qualify for the best possible interchange rate.

**RECORD LAYOUTS  
(Continued)**

**Product Record: Procurement Level 2 and Line Item Level Data – Record #1**

```

1      2      3      4      5      6      7      8      12
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0
AAANNNAAAAAAAAAAAAAAAAAANNNNNNNNNNNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
PPC001CUSTREF123456789 000000000000                                J
    
```

Position	Length	Data Type	Field Name	Comments
1	1	A	Product Record Identifier	"P" Constant – Specifies this record as a product record of the Chase Paymentech standard format.
2,3	2	A	Product Record Type	"PC" Constant
4,6	3	N	Product Record Sequence Number	"001" Constant
24,35	12	N	Sales Tax Amount	Amount of sales tax assessed to the transaction. (Optional) Two decimal implied/right justified/zero filled or blanks <b>Notes:</b> For American Express Corporate Purchasing Solutions (CPS) Level 2 processing, this field is not required (transaction does not reject). For American Express Corporate Purchasing Solutions (CPS) Level 2 processing, this field can be all zeros. <b>North America (U.S. and Canada)</b> For Visa Level 2 processing, the sales tax amount must be between 0.1% and 22% of the purchase price or the transaction does not qualify for the best possible interchange rate. For Visa Level 3 processing, this field may be blank.

*Continued on next page*

**RECORD LAYOUTS  
(Continued)**

**Product Record: Procurement Level 2 and Line Item Data – Record #1, (Continued)**

1	2	3	4	5	6	7	8	12
123456789012345678901234567890123456789012345678901234567890 . . . 0								
AAANNNAAAAAAAAAAAAAAAAAANNNNNNNNNNNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA								
PPC001CUSTREF123456789 000000000000								J

Position	Length	Data Type	Field Name	Comments
			Sales Tax Amount, (Continued)	<p><b>Notes, (Continued):</b></p> <p>For MasterCard and MasterCard Diners Level 2 processing, the sales tax amount must be between 0.1% and 30% of the purchase price or the transaction does not qualify for the best possible interchange rate.</p> <p>For MasterCard and MasterCard Diners Level 2 processing, certain merchants are not required to submit a sales tax amount to qualify for the best possible interchange rate. See <i>Appendix V: Level 2 and Line Item Level Data</i> for a list of MCCs.</p> <p>For MasterCard and MasterCard Diners Level 3 processing, this field is required. If this field is not populated, the transaction rejects with Response Reason Code 243 (Invalid Purchase Level 3).</p> <p>For MasterCard, MasterCard Diners, and Visa Level 2, if this field contains invalid characters, it is not sent to the Issuer.</p> <p><b>International (Great Britain and Ireland)</b> For MasterCard Summary Tax or Line Item Data processing, this field is optional.</p> <p>This field is not used for Visa.</p>

## APPENDIX I: MASTERCARD SECURECODE

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**Introduction** MasterCard SecureCode is a solution designed to authenticate accountholders when paying online. SecureCode offers a mechanism for securing the Internet channel by strongly authenticating the accountholder at the point of interaction by providing a unique transaction-specific token that provides evidence that the accountholder originated the transaction. SecureCode uses MasterCard's Universal Cardholder Authentication Field (UCAF) infrastructure to communicate the authentication information among the accountholder, Issuer, merchant and Acquirer.

MasterCard SecureCode supports the 3-D Secure Protocol. MasterCard SecureCode requires merchants to install a 3-D Secure v1.0.2 compliant Merchant Server Plug-In software application.

International Maestro supports the same SecureCode features as MasterCard.

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**How It Works** The accountholder shops at a participating SecureCode Internet Merchant with no changes to the shopping or checkout. The accountholder selects the merchandise to be purchased and proceeds to the checkout. At the checkout, the accountholder may complete the purchase and payment information in a variety of ways, including self-entered, electronic wallet, merchant one-click, or using other checkout capabilities.

After the purchase and payment information is entered, the customer hits the "buy" button and the Confirmation page goes back to the merchant.

The merchant plug-in (MPI) activates and checks its local cache and the MC Directory Server to determine if the customer card number is part of a participating MasterCard SecureCode BIN range. If so, a Verify Enrollment Request message is sent from the MPI, to the MC Directory Server and forwarded to the Issuer Access Control Server (ACS) to determine if authentication is available for the accountholder's account number. The MC Directory Server sends the Issuer ACS response to the MPI. If authentication is available, the message response provides the web address for the Issuer ACS where the accountholder authentication begins. (If authentication is not available, the merchant server receives an "authentication not available" message and returns the transaction to the merchant's commerce server to proceed with a standard Authorization Request.)

The MPI sends a message and script directing the accountholder's browser to establish a session with the Issuer ACS to perform authentication. The in-line authentication window displays Issuer-specific and MC branding, transaction details – including merchant name and sale amount, and prompts the accountholder to enter their secure code (e.g. password). If the password is entered correctly, the transaction continues.

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## APPENDIX I: MASTERCARD SECURECODE (Continued)

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### How It Works, (Continued)

The accountholder is allowed a limited number of password attempts, typically three to five, as defined by the Issuer ACS. If unable to correctly enter the password, the accountholder may access the password hint that was established during registration. If the password is incorrectly entered more times than the Issuer limit, a failed Payer Authentication Response is returned to the merchant.

The Issuer ACS retrieves the authentication information and compares it against the data that was registered during the initial accountholder registration process. If the data matches, a success page is presented to the accountholder and the Issuer ACS sends a message through the browser to the merchant providing evidence of accountholder authentication, including a 28-byte AAV. This AAV is generated cryptographically using Issuer-specific secret keys that are synchronized with keys at the Issuer's authorization platform.

For a fully authenticated transaction, the merchant sends the AAV with Transaction Type = 5 to Chase Paymentech.

If the MasterCard Authentication record is sent without the CAVV, the CAVV is not sent in Base 64 encoding, or is sent for a non-e-Commerce transaction, Response Reason Code 245 (Missing or Invalid Secure Payment Data) is returned.

Chase Paymentech passes the AAV and Transaction Type to MasterCard with the authorization request. These fields are used during authorization processing to verify that authentication, or attempted authentication, was performed and to qualify for the e-Commerce Custom Payment Services.

**Activation During Shopping (ADS):** Accountholders that are not enrolled in SecureCode may be presented with an enrollment window while shopping at a SecureCode merchant's website. Unlike the traditional enrollment process, ADS does not require the customer to visit an enrollment web site before shopping. This type of enrollment takes place during the shopping process. When an eligible customer goes to checkout, the card-issuing bank asks a series of questions – similar to the traditional enrollment process. Providing the correct answers results in both a successful enrollment and a successful authentication response returned to the merchant. The merchant must send the AAV they receive to Chase Paymentech, along with Transaction Type of 5. If the accountholder chooses to opt-out of enrollment during shopping, the Issuer passes an AAV to the merchant. In this case, the merchant is not required to submit the AAV with the authorization, but must send Transaction Type of 6.

*Continued on next page*

## APPENDIX I: MASTERCARD SECURECODE (Continued)

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### How It Works, (Continued)

**Non-participating MasterCard SecureCode Issuers:** Participating MasterCard SecureCode merchants that attempt to authenticate a accountholder where the Issuer is not participating in MasterCard SecureCode do not receive an AAV. Merchants must pass these transactions with Transaction Type = 6.

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### Processing Requirements for Merchants Using International Maestro and the Maestro Advanced Registration Program or the MasterCard Advanced Registration Program (MARP)

Both the Maestro Advanced Registration Program and the MasterCard Advanced Registration Program (MARP) allow enrolled merchants to accept Maestro and MasterCard cards for e-commerce transactions without using SecureCode for every transaction. However, merchants are required to perform a full authentication on the first transaction they perform for any individual accountholder. An enrolled MARP merchant is provided with a static Accountholder Authentication Value (AAV) for use with transactions that are processed without SecureCode authentication.

Once a merchant has registered in the MARP (either the Maestro program, the MasterCard program, or both), all accountholders must go through the SecureCode process again, regardless of whether the accountholder has gone through SecureCode prior to the merchant's registration. After the accountholder has gone through SecureCode and has been approved, the accountholder is not required to go through SecureCode for subsequent transactions. The Method of Payments affected are IM (International Maestro) and MC (MasterCard) for European merchants.

For the first International Maestro or MasterCard e-commerce transaction, the merchant must request SecureCode authentication before submitting the transaction for authorization. If that transaction is subsequently authorized by the issuer, it is guaranteed to the merchant, regardless of whether the Issuer or accountholder participates in SecureCode.

The merchant populates the first SecureCode transaction as they do any SecureCode transaction.

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## APPENDIX I: MASTERCARD SECURECODE (Continued)

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**Processing Requirements for Merchants Using International Maestro and the Maestro Advanced Registration Program or the MasterCard Advanced Registration Program (MARP),**  
(Continued)

### **Fully Authenticated Transactions**

For the first transaction that is fully authenticated, the merchant populates:

1. Transaction Type field with "5" (ECI Indicator – Secure Electronic Commerce Transaction), and
2. AAV field with what was returned at authentication.

### **Attempted Authentication Transactions**

For the first transaction that is an attempted authentication, the merchant populates:

1. Transaction Type field with "6" (ECI Indicator – Non-Authenticated Electronic Commerce Transaction), and
2. AAV field with blanks.

If the first International Maestro or MasterCard e-commerce transaction for the account holder who has registered with the merchant is authorized by the Issuer, the merchant can skip the SecureCode authentication on subsequent transactions by the same customer using the same International Maestro or MasterCard account.

### **Subsequent Transactions**

For subsequent transactions, the merchant populates:

1. Transaction Type Field with "5" (ECI Indicator – Secure Electronic Commerce Transaction), and
2. AAV field with the assigned static AAV.

If a registered account holder uses a different International Maestro or MasterCard account for a transaction, the merchant must request SecureCode authentication before submitting the transaction for authorization.

The merchant always has the option of requesting SecureCode authentication for any International Maestro transaction, in which case the transaction is governed by Maestro rules. If the transaction is subsequently authorized by the Issuer, it is guaranteed to the acquirer or its merchant, regardless of whether the Issuer or account holder participates in SecureCode as determined by the merchant request.

Issuers may chargeback transactions that are processed using the static AAV.

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## APPENDIX I: MASTERCARD SECURECODE (Continued)

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### Merchant Requirements

The merchant must install a certified 3-D Secure Merchant Plug-in software application.

The merchant must verify that Merchant Plug-in provides AAV in Base 64 encoding. If not, the merchant must convert to Base 64 before sending to Chase Paymentech.

In the settlement of a MasterCard SecureCode transaction, merchants are strongly encouraged to submit the MasterCard Authentication Extension Record. In the event that Chase Paymentech has to perform a new authorization, the authentication data (AAV) is included in the new authorization. By doing so, the merchant maintains the MasterCard SecureCode chargeback liability shift for authenticated transactions.

Merchants must map the MasterCard Electronic Commerce Indicator (ECI) they receive via their MPI to the appropriate Chase Paymentech Transaction Type:

Transaction Description	MasterCard ECI Returned in MPI	Chase Paymentech Transaction Type
Fully Authenticated	02	5
Attempted Authentication	01	6
Authentication Failed or Not Available	No ECI returned	7

Merchants must test and certify with Chase Paymentech to become MasterCard SecureCode enabled.

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## APPENDIX I: MASTERCARD SECURECODE (Continued)

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- Merchant Guidelines**
- Merchants are required to request authorization for all SecureCode e-Commerce transactions.
  - For International Maestro, it is highly recommended that merchants send SecureCode for e-Commerce transactions.
  - Merchants must supply the AAV on all authorization attempts.
  - Initial SecureCode authorization requests with AAVs older than 30 calendar days may be declined by the Issuer.
  - Subsequent authorization attempts must include the AAV.
  - Recurring payments should include AAV data for the initial authorization request only. Merchants must not provide authentication data in recurring payment authorizations as these are not considered electronic commerce transactions by MasterCard and subsequently are not eligible for MasterCard SecureCode processing.
- 

**Card Types / Supported Currencies**

International Maestro, MasterCard / All currencies  
MARP – International Maestro, MasterCard (for European merchants only)

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**Response Reason Codes**

*Appendix A: Response Reason Code Description/Usage*

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**To Get Started**

Contact your Chase Paymentech Representative.

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## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA

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### Introduction

Chase Paymentech supports the processing of procurement cards and fleet cards for U.S. and Canada by fully supporting the enhanced data required by MasterCard, MasterCard Diners, and Visa for both Level 2 and Level 3 data.

For American Express, Chase Paymentech supports Level 2 and enhanced TAA.

For Discover and Discover Diners, Chase Paymentech supports Level 2 and Line Item Level Data.

For international (Great Britain and Ireland) MasterCard, Chase Paymentech supports Summary Tax and Line Item Detail.

For international (Great Britain) Visa, Chase Paymentech supports Line Item Detail.

Level 3, Summary Tax, and Line Item Detail data is typically used in a business-to-business environment providing merchants with a mechanism to eliminate the costly paper process of providing and collecting funds for outstanding invoices. Merchants have the ability to collect their funds in conjunction with the settlement of their credit card transactions and still provide their customer with the necessary line item detail. Thus, providing a cleaner process for both the merchant and their customer.

It is not necessary to send Level 2 and line item data when Action Code = AU (Authorization), as additional costs are incurred for processing these records.

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## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

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### Edit Checks

Data fields that are edited by Chase Paymentech have been marked “required” in the record layout section of this document.

#### North America (U.S. and Canada)

Chase Paymentech performs edit checks on incoming data to ensure necessary information is present. In the event necessary information is missing from a transaction with Level 2 data, the interchange rate for the transaction are downgraded accordingly and passed on to the respective card association.

If necessary information is missing from a transaction with Level 3 data, the transaction, Chase Paymentech rejects by Chase Paymentech with Response Reason Code 243 (Invalid Purchase Level 3).

#### International (Great Britain and Ireland)

International transactions are defined as:

- Merchant domiciled in Great Britain or Ireland
- Card is issued in Great Britain or Ireland
- Merchant country and card issuing country must be the same (e.g. an Ireland merchant and an Ireland Issuer)

If necessary information is missing from an international MasterCard transaction with Summary Tax or Line Item Detail data, the transaction does not qualify for the best possible interchange rate. This is supported in both Great Britain and Ireland.

If necessary information is missing from an international Visa transaction with Line Item Detail data, Chase Paymentech rejects the transaction with Response Reason Code 243 (Invalid Purchase Level 3). This is supported in Great Britain only.

International field edits do not apply when merchant country and Issuing country do not match. The information provided is passed to the association.

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### BIN Ranges

The BIN ranges assigned by the North American (U.S. and Canada) card associations can identify purchasing cards. Commercial Card BIN Ranges (Business, Corporate, and Purchasing) are available via Chase Paymentech Online. Active BINS can be downloaded.

**Note:** BIN Ranges are subject to change at the discretion of the card associations.

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## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

### Supported Card Issuing Countries

The following chart identifies supported card issuing countries.

	American Express	Discover and Discover Diners	MasterCard	MasterCard Diners	Visa
Level 2	North America (U.S.)	North America (U.S.)	North America (U.S. and Canada)	North America (U.S. and Canada)	North America (U.S. and Canada)
Level 3/ Summary Tax/Line Item Detail		North America (U.S.)	North America (U.S. and Canada) and International (Great Britain and Ireland)	North America (U.S. and Canada)	North America (U.S. and Canada) and International (Great Britain)

### Fleet (North America – U.S. and Canada)

Chase Paymentech supports the processing of fleet cards by fully supporting the enhanced data required by MasterCard and Visa for transactions conducted at petroleum and T&E locations. Fleet card data is typically used by Commercial Fleet customers to gain control of vehicle fuel and maintenance expenses as well as expenses incurred by the driver. This is accomplished through designated BIN ranges that prompt for additional information at the point of sale in conjunction with user-controlled acceptance parameters designated through the card issuer.

**Note:** Fleet transactions must use the Fleet, Fuel and Procurement Level 2 records to support Fleet processing. For Fleet transactions that are non-fuel, the Procurement Level 3 records must be used.

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## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

**American Express Level 2/3 (North America – U.S.)**

American Express currently supports Level 2 and enhanced TAA processing with Chase Paymentech.

**Note:** Prior to submitting American Express purchasing card transactions, please contact American Express and your Chase Paymentech Representative to have your account set up.

**Required Records for American Express Level 2/3**

Card Type	Required Record	Description	Comments
American Express	<b>S</b>	<b>“S” Record</b>	
American Express	<b>EAX</b>	<b>TAA Record for American Express</b>	TAA1 and TAA2
American Express	<b>EAX</b>	<b>TAA Record for American Express</b>	TAA3 and TAA4
American Express	<b>PPC</b>	<b>Product Record for Level 2</b>	Can be sent without EAX records
American Express	<b>HA or AS</b>	<b>Ship to address</b>	Should be sent with EAX or PPC records. If ship to address is not sent, Chase Paymentech sends the Merchant’s postal code to American Express.

**Discover and Discover Diners Level 2 (North America – U.S.)**

Level 2 data can be sent on all Discover and Discover Diners cards.

**Required Records for Level 2**

Card Type	Required Record	Description	Comments
Discover and Discover Diners	<b>S</b>	<b>“S” Record</b>	
Discover and Discover Diners	<b>PPC</b>	<b>Product Record for Level 2</b>	

*Continued on next page*

## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

**Discover and Discover Diners Line Item Level Data (North America – U.S.)**

Line Item Level Data can be sent on all Discover and Discover Diners cards.

Product Record: Procurement Level 2 and Line Item Level Data

Product Record: Discover and Discover Diners Line Item Level Data – Record #1

Product Record: Discover and Discover Diners Line Item Level Data – Record #2

**Required Records for Line Item Level Data**

Card Type	Required Record	Description	Comments
Discover and Discover Diners	S	“S” Record	
Discover and Discover Diners	PPC	Product Record for Level 2	
Discover and Discover Diners	PP1	Product Record for Line Item Level Data	Line item level data – one for each line item. See spec for specific record for Discover and Discover Diners
Discover and Discover Diners	PP2	Product Record for Line Item Level Data	Line item level data – one for each line item. See spec for specific record for Discover and Discover Diners

*Continued on next page*

## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

**MasterCard, MasterCard Diners, and Visa Level 2 – North America (U.S. and Canada)**

Level 2 is used for Corporate/Business Cards.

Corporate/Business cards are issued to a corporation for travel, entertainment and other expenses. MasterCard previously used the term “business card” and now uses “corporate card”. Visa uses both terms “business card” and “corporate card”.

**Required Records for Level 2**

Card Type	Required Record	Description	Comments
MasterCard/ MasterCard Diners/Visa	S	“S” Record Input	
MasterCard/ MasterCard Diners/Visa	PPC001	Product Record for Level 2 – Record #1	
MasterCard/ MasterCard Diners/Visa	LA, HA, or AB	Bill to Address	Not required for Level 2 processing; however, required for best possible interchange rate (U.S. only).

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## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

**MasterCard and MasterCard Diners Level 2 Processing – MCCs and Sales Tax Amount - North America (U.S. and Canada)**

Certain merchants are not required to submit a sales tax amount to qualify for the best possible interchange rate. See the Sales Tax Amount field in the PPC001 Product Record: Procurement Level 2 and Line Item Level Data – Record #1 (PPC001) for more information.

If a merchant is assigned an MCC from the list below, they are not required to submit the sales tax amount:

MCC	Description
4111	Transportation – Suburban and Local Commuter Passenger, including Ferries
4131	Bus Lines
4215	Courier Services – Air and Ground, Freight Forwarders
4468	Marinas, Marine Service/Supplies
4784	Bridge and Road Fees, Tolls
5541	Fuel-Inside Sales
5542	Automated Fuel Dispenser
5499	Convenience Stores, Markets, Specialty Stores
5983	Fuel Dealers
7511	Truck Stops
8211	Schools, Elementary and Secondary
8220	Colleges, Universities, Professional Schools, and Junior Colleges
8398	Organizations, Charitable and Social Service
8661	Organizations, Religious
9211	Court Costs including Alimony and Child Support
9222	Fines
9311	Tax Payments
9399	Government Services – not elsewhere classified
9402	Postal Services – Government Only

**MasterCard, MasterCard Diners, and Visa Level 3 – North America (U.S. and Canada)**

Level 3 is used for purchasing cards (also known as Business to Business). Consider this as a replacement for a purchase order.

In order to provide the necessary enhanced data, Chase Paymentech requires additional records be submitted per transaction.

*Continued on next page*

## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

**MasterCard,  
MasterCard  
Diners, and  
Visa Level 3 –  
North  
America (U.S.  
and Canada),  
(Continued)**

These records are:

- Product Record: Level 2 – Record #1
- Product Record: Procurement Level 3 Order Level
- Product Record: Procurement Level 3 Record #1 Line Item Detail Record
- Product Record: Procurement Level 3 Record #2 Line Item Detail Record

**Note:** Bill to Address record not required for Level 2 or Level 3 processing; however, required for best possible interchange rate.

### Required Records for Line Item Level Data

Card Type	Required Record	Description	Comments
MasterCard/ MasterCard Diners/Visa	S	“S” Record Input	
MasterCard/ MasterCard Diners/Visa	PPC001	Product Record for Level 2 – Record #1	Optional for Visa. Mandatory for MasterCard.
MasterCard/ MasterCard Diners/Visa	PP0	Product Record for Procurement Level 3	Order level record. Each card type has a specific record.
MasterCard/ MasterCard Diners/Visa	PP1	Product Record for Procurement Level 3	Line item level data – one for each line item. Each card type has a specific record.
MasterCard/ MasterCard Diners/Visa	PP2	Product Record for Procurement Level 3	Line item level data – one for each line item. Each card type has a specific record.
MasterCard/ MasterCard Diners/Visa	LA, HA, or AB	Bill to Address	Not required for Level 3 processing; however, required for best possible interchange rate (U.S. only).

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## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

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**MasterCard  
Summary Tax  
and Line Item  
Detail and  
Visa Line Item  
Detail –  
International  
(Great Britain  
and Ireland)**

MasterCard Europe has two types of detail information similar to U.S. Level 3 and is supported by Chase Paymentech in both Great Britain and Ireland:

- Summary Tax
- Line Item Detail

Summary Tax has limited information on the goods/services purchased. This information is acceptable as evidence for VAT deductions, but it does not provide descriptive information for these purchased goods and services. For each different commodity code and VAT rate combination, all of the items may be collected into a single line item.

The merchant can only process Summary Tax and Line Item Detail in their domestic currency.

Visa Europe has one type of detail information similar to U.S. Level 3 and is supported by Chase Paymentech in Great Britain only:

- Line Item Detail

The merchant can only process Line Item Detail in their domestic currency.

*Continued on next page*

## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

**MasterCard  
Summary Tax  
and Line Item  
Detail and  
Visa Line Item  
Detail –  
International  
(Great Britain  
and Ireland,  
(Continued)**

Summary Tax and Line Item Data information is used for Purchasing Cards (also known as Business to Business). Consider this as a replacement for a Purchase Order.

In order to provide the necessary enhanced data, Chase Paymentech requires additional records be submitted per transaction. These records are:

- Product Record: Level 2 – Record #1
- Product Record: Level 2 – Record #2
- Product Record: Procurement Level 3 Order Level
- Product Record: Procurement Level 3 Record #1 Line Item Detail Record
- Product Record: Procurement Level 3 Record #2 Line Item Detail Record

### Required Records for Summary Tax and Line Item Level Data

Card Type	Required Record	Description	Comments
MasterCard/ Visa	S	“S” Record Input	
MasterCard/ Visa	PPC001	Product Record for Procurement Level 2 – Record #1	Optional for MasterCard. Mandatory for Visa.
MasterCard/ Visa	PPC002	Product Record for Procurement Level 2 – Record #2	Mandatory for MasterCard and Visa.
MasterCard/ Visa	PP0	Product Record for Procurement Level 3	Order level record. Each card type has a specific record.
MasterCard/ Visa	PP1	Product Record for Procurement Level 3	Line item level data – one for each line item. Each card type has a specific record.
MasterCard/ Visa	PP2	Product Record for Procurement Level 3	Line item level data – one for each line item. Each card type has a specific record.

*Continued on next page*

## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

**Record Sequence**

Transactions must be submitted using this record sequence. A record may have up to 998 line item detail records.

**Note:** Line item detail records #1 and #2 must both be present in sequential order increasing by one (1) to meet processing requirements.

**Record Sequence Example**

Proper sequence for sending an order with 998 line items:

<b>North America (U.S. and Canada)</b>	
S	Detail record with the total amount of the 998 line items is generated
PPC001	Level 2 order level with the sales tax amount for the 998 line items
PP0001	Level 3 order level with the freight amount for the 998 line items (Not applicable for Discover)
PP1002	Level 3 record for line item #1 – First line item
PP2002	Level 3 record for line item #1
PP1003	Level 3 record for line item #2 – Second line item
PP2003	Level 3 record for line item #2
...	...
PP1999	Level 3 record for line item #998 – Nine hundred ninety-eighth line item
PP2999	Level 3 record for line item #998
S	Detail record for the next order to be processed

**Note:** Bill to Address record not required for Level 2 or Level 3 processing; however, required for best possible interchange rate.

*Continued on next page*

## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

**Record  
Sequence  
Example,  
(Continued)**

<b>International (Great Britain and Ireland)</b>	
S	Detail record with the total amount of the 998 line items is generated
PPC001	Level 2 order level with the sales tax amount for the 998 line items
PPC002	Level 2 order level with the VAT tax rate for the 998 line items.
PP0001	Level 3 order level with the freight amount for the 998 line items
PP1002	Level 3 record for line item #1 – First line item
PP2002	Level 3 record for line item #1
PP1003	Level 3 record for line item #2 – Second line item
PP2003	Level 3 record for line item #2
...	...
PP1999	Level 3 record for line item #998 – Nine hundred ninety-eighth line item
PP2999	Level 3 record for line item #998
S	Detail record for the next order to be processed

*Continued on next page*

## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

### Sample Input File: MasterCard and Visa

1	2	3	4	5	6	7	8	9	10	11	12	
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890												
PID=123456 XYZCO	SID=123456 XYZCO	START	031202	3.0.0						PCARD		[ 1 ]
S0000123456NMMCPUR900365CPD	DPMC5412345678901234	1204000005050000840100	031130234567									[ 2 ]
PPC0013462265554KMG3650000000050000												[ 3 ]
PP0001000050000	03079-1952USA03106											[ 4 ]
PP1002CADILLAC COUPE DEVILLE	016625033	00001EA	00005000001000									[ 5 ]
PP2002005000000	NLUX N											[ 6 ]
AB03079												[ 7 ]
S0000123456NMVIPUR900365CPD	DCVI4123456789012345	12040000050000500840										[ 8 ]
PPC0013462265554GTR3650000000000500												[ 9 ]
PP0001000000050000000000100003079-1952USA031060000000000000300												[ 10 ]
PP1002CADILLAC COUPE DEVILLE	123456789012000000010000EA											[ 11 ]
PP2002000005000000000000000000AUTO	000500000000											[ 12 ]
AB03079												[ 13 ]
S0000123456237000000000	DPMC5569500000000001	0807000000200000826100	031130234566									[ 14 ]
PPC0019898989898	000000000000											[ 15 ]
PPC002 GBHA123												[ 16 ]
PP00010000000000000000000003079	USAA1 2BC											[ 17 ]
PP1002DESKS	00020EA											[ 18 ]
PP2002000200000	N N1234	000001000000										[ 19 ]
S0000123456237INVOICEA	DPVI4715050000000003	0108000000006227826100	031130234568									[ 20 ]
PPC001123456ABC	000000010789											[ 21 ]
PPC002LID GBHA123												[ 22 ]
PP000100000000000000000000000003079	USAA1 2BC	00000000000000000006201750000										[ 23 ]
PP1002OFFICE FURNITURE	000000010000EA	0000000000620100										[ 24 ]
PP20020000000061650000000000009400	000000616500											[ 25 ]
B RECS=000000025	ORDS=000000004	\$TOT=00000010256840	\$SALE=00000010256840	\$REFUND=00000000000000								[ 26 ]
T RECS=000000026	ORDS=000000004	\$TOT=00000010256840	\$SALE=00000010256840	\$REFUND=00000000000000								[ 27 ]
PID=123456 XYZCO	SID=123456 XYZCO	END	031202									[ 28 ]
1234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890												

Please see the following page for Procurement Card Input File Line Description.

*Continued on next page*

## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

### Sample Input File: MasterCard and Visa

- Line 1: Header Record
- Line 2: Detail Record (MasterCard) U.S.
- Line 3: Product Record: Procurement Level 2 and Line Item Data – Record #1 (MasterCard – U.S.)
- Line 4: Product Record: MasterCard and MasterCard Diners Procurement Level 3 – Order Level Record (MasterCard – U.S.)
- Line 5: Product Record: MasterCard and MasterCard Diners Procurement Level 3 – Line Item Level Data – Record #1 (MasterCard – U.S.)
- Line 6: Product Record: MasterCard and MasterCard Diners Procurement Level 3 – Line Item Level Data – Record #2 (MasterCard – U.S.)
- Line 7: Address Record: Bill to Address (MasterCard – U.S.)
- Line 8: Detail Record (Visa – U.S.)
- Line 9: Product Record: Procurement Level 2 and Line Item Data – Record #1 (Visa – U.S.)
- Line 10: Product Record: Visa Procurement Level 3 – Order Level Record (Visa – U.S.)
- Line 11: Product Record: Visa Procurement Level 3 – Line Item Level Data – Record #1 (Visa – U.S.)
- Line 12: Product Record: Visa Procurement Level 3 – Line Item Level Data – Record #2 (Visa – U.S.)
- Line 13: Address Record: Bill to Address (Visa – U.S.)
- Line 14: Detail Record (MasterCard - Great Britain)
- Line 15: Product Record: Procurement Level 2 and Line Item Data – Record #1 (MasterCard – Great Britain)
- Line 16: Product Record: Procurement Level 2 and Line Item Data – Record #2 International (Great Britain and Ireland) (MasterCard – Great Britain)
- Line 17: Product Record: MasterCard and MasterCard Diners Procurement Level 3 – Order Level Record (MasterCard – Great Britain)
- Line 18: Product Record: MasterCard and MasterCard Diners Procurement Level 3 – Line Item Level Data – Record #1 –  
(MasterCard – Great Britain)
- Line 19: Product Record: MasterCard and MasterCard Diners Procurement Level 3 – Line Item Level Data – Record #2 –  
(MasterCard – Great Britain)
- Line 20: Detail Record (Visa – Great Britain)
- Line 21: Product Record: Procurement Level 2 and Line Item Data – Record #1 (Visa – Great Britain)
- Line 22: Product Record: Procurement Level 2 and Line Item Data Record #2 International (Great Britain and Ireland) (Visa – Great Britain)
- Line 23: Product Record: Visa Procurement Level 3 – Order Level Record (Visa – Great Britain)
- Line 24: Product Record: Visa Procurement Level 3 – Line Item Level Data – Record #1 (Visa – Great Britain)
- Line 25: Product Record: Visa Procurement Level 3 – Line Item Level Data – Record #2 (Visa – Great Britain)
- Line 26: Batch Totals Record
- Line 27: Totals Record
- Line 28: Trailer Record

*Continued on next page*



## APPENDIX V: LEVEL 2 AND LINE ITEM LEVEL DATA (Continued)

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**Card Types / Supported Currencies** American Express, Discover, Discover Diners, MasterCard, Visa /All currencies

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

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**To Get Started** Contact your Chase Paymentech Representative.

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## **END OF THE TECHNICAL SPECIFICATION**

### **120-Byte Batch Processing Version 3.0.0 Revision 5.0 Addendum In Support of October 2010 Bank Card Regulations Rev. 1**

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**10/15/2010**