



810 Invoice

X12/V4010/810 : 810 Invoice

Version: 1.2

Created:	8/16/2021
Modified:	10/23/2023

Table of Contents

Invoice.....	1
Interchange Control Header	3
Functional Group Header	5
Transaction Set Header	7
Beginning Segment for Invoice.....	8
Currency	9
Reference Identification.....	10
Loop Name	11
Name.....	12
Additional Name Information	13
Address Information	14
Geographic Location	15
Date/Time Reference	16
Loop Baseline Item Data (Invoice).....	17
Baseline Item Data (Invoice)	18
Loop Service, Promotion, Allowance, or Charge Information.....	20
Service, Promotion, Allowance, or Charge Information	21
Total Monetary Value Summary	23
Loop Service, Promotion, Allowance, or Charge Information.....	24
Service, Promotion, Allowance, or Charge Information	25
Transaction Totals	27
Transaction Set Trailer.....	28
Functional Group Trailer.....	29
Interchange Control Trailer.....	30
EDI Sample	31

810

Invoice

Functional Group=IN

Purpose: This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

Not Defined:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	ISA	Interchange Control Header	M	1			Must use
	GS	Functional Group Header	M	1			Must use

Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1			Must use
020	BIG	Beginning Segment for Invoice	M	1			Must use
040	CUR	Currency	O	1		N1/040	Used
050	REF	Reference Identification	O	12			Used
<u>LOOP ID - N1</u>					<u>200</u>		
070	N1	Name	M	1			Must use
080	N2	Additional Name Information	O	2			Used
090	N3	Address Information	M	2			Used
100	N4	Geographic Location	M	1			Used
140	DTM	Date/Time Reference	M	10			Must use

Detail:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
<u>LOOP ID - IT1</u>					<u>200000</u>		
010	IT1	Baseline Item Data (Invoice)	O	1			Used
<u>LOOP ID - SAC</u>					<u>25</u>		
180	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Used

Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	TDS	Total Monetary Value Summary	M	1		N3/010	Must use
<u>LOOP ID - SAC</u>					<u>25</u>		
040	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Used
070	CTT	Transaction Totals	O	1		N3/070	Used
080	SE	Transaction Set Trailer	M	1			Must use

Not Defined:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control Trailer	M	1			Must use

Notes:

1/040 CUR|BY|USD}
3/010 TDS|58060}

3/070 Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

ISA Interchange Control Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 16

User Option (Usage): Must use

Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	Authorization Information Qualifier	M	ID	2/2	Must use
		Description: Code to identify the type of information in the Authorization Information All valid standard codes are used. (Total Codes: 7)				
ISA02	I02	Authorization Information	M	AN	10/10	Must use
		Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)				
ISA03	I03	Security Information Qualifier	M	ID	2/2	Must use
		Description: Code to identify the type of information in the Security Information All valid standard codes are used. (Total Codes: 2)				
ISA04	I04	Security Information	M	AN	10/10	Must use
		Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)				
ISA05	I05	Interchange ID Qualifier	M	ID	2/2	Must use
		Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used. (Total Codes: 38)				
ISA06	I06	Interchange Sender ID	M	AN	15/15	Must use
		Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element				
ISA07	I05	Interchange ID Qualifier	M	ID	2/2	Must use
		Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used. (Total Codes: 38)				
ISA08	I07	Interchange Receiver ID	M	AN	15/15	Must use
		Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them				
ISA09	I08	Interchange Date	M	DT	6/6	Must use
		Description: Date of the interchange				
ISA10	I09	Interchange Time	M	TM	4/4	Must use
		Description: Time of the interchange				
ISA11	I10	Interchange Control Standards Identifier	M	ID	1/1	Must use
		Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer All valid standard codes are used. (Total Codes: 1)				

ISA12	I11	Interchange Control Version Number	M	ID	5/5	Must use
Description: Code specifying the version number of the interchange control segments						
Code List Summary (Total Codes: 14, Included: 4)						
		<u>Code</u>	<u>Name</u>			
		00307	Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1996			
		00400	Standard Issued as ANSI X12.5-1997			
		00401	Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997			
		00402	Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1998			
ISA13	I12	Interchange Control Number	M	NO	9/9	Must use
Description: A control number assigned by the interchange sender						
ISA14	I13	Acknowledgment Requested	M	ID	1/1	Must use
Description: Code sent by the sender to request an interchange acknowledgment (TA1)						
All valid standard codes are used. (Total Codes: 2)						
ISA15	I14	Usage Indicator	M	ID	1/1	Must use
Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information						
All valid standard codes are used. (Total Codes: 3)						
ISA16	I15	Component Element Separator	M		1/1	Must use
Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator						

Comments:

1. ISA|00| |00| |ZZ|DKEUS |ZZ|123456789 |211109|1356|U|00401|009454559|0|P|^}

GS**Functional Group Header**

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 8

User Option (Usage): Must use**Purpose:** To indicate the beginning of a functional group and to provide control information**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS01	479	Functional Identifier Code	M	ID	2/2	Must use
Description: Code identifying a group of application related transaction sets						
Code List Summary (Total Codes: 240, Included: 1)						
		<u>Code</u> <u>Name</u>				
		IN Invoice Information (810,819)				
GS02	142	Application Sender's Code	M	AN	2/15	Must use
Description: Code identifying party sending transmission; codes agreed to by trading partners						
GS03	124	Application Receiver's Code	M	AN	2/15	Must use
Description: Code identifying party receiving transmission; codes agreed to by trading partners						
GS04	373	Date	M	DT	8/8	Must use
Description: Date expressed as CCYYMMDD						
GS05	337	Time	M	TM	4/8	Used
Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)						
GS06	28	Group Control Number	M	N0	1/9	Used
Description: Assigned number originated and maintained by the sender						
GS07	455	Responsible Agency Code	M	ID	1/2	Used
Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480						
All valid standard codes are used. (Total Codes: 2)						
GS08	480	Version / Release / Industry Identifier Code	M	AN	1/12	Used
Description: Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed						
Code List Summary (Total Codes: 39, Included: 1)						
		<u>Code</u> <u>Name</u>				
		004010 Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997				

Semantics:

1. GS04 is the group date.
2. GS05 is the group time.

3. The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

Comments:

1. A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.
2. GS|IN|DKEUS|COMPANYID|20211109|1356|9454559|X|004010~

ST Transaction Set Header

Pos: 010	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

Purpose: To indicate the start of a transaction set and to assign a control number

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	Transaction Set Identifier Code	M	ID	3/3	Must use
Description: Code uniquely identifying a Transaction Set All valid standard codes are used. (Total Codes: 298)						
ST02	329	Transaction Set Control Number	M	AN	4/9	Must use
Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set						

Semantics:

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Comments:

1. ST|10|0001~

BIG Beginning Segment for Invoice

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 8

User Option (Usage): Must use

Purpose: To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
BIG01	373	Date	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD				
BIG02	76	Invoice Number	M	AN	1/22	Must use
		Description: Identifying number assigned by issuer				
BIG03	373	Date	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD				
BIG04	324	Purchase Order Number	M	AN	1/22	Must use
		Description: Identifying number for Purchase Order assigned by the orderer/purchaser				
BIG05	328	Release Number	O	AN	1/30	Used
		Description: Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction				
BIG06	327	Change Order Sequence Number	O	AN	1/8	Used
		Description: Number assigned by the orderer identifying a specific change or revision to a previously transmitted transaction set				
BIG07	640	Transaction Type Code	O	ID	2/2	Used
		Description: Code specifying the type of transaction All valid standard codes are used. (Total Codes: 446)				
BIG10	76	Invoice Number	O	AN	1/22	Used
		Description: Identifying number assigned by issuer				

Semantics:

1. BIG01 is the invoice issue date.
2. BIG03 is the date assigned by the purchaser to purchase order.

Comments:

1. BIG|20211109|85289603|20211109|52190~

CUR Currency

Pos: 040	Max: 1
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

Purpose: To specify the currency (dollars, pounds, francs, etc.) used in a transaction

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CUR01	98	Entity Identifier Code	M	ID	2/3	Must use
Description: Code identifying an organizational entity, a physical location, property or an individual All valid standard codes are used. (Total Codes: 1312)						
CUR02	100	Currency Code	M	ID	3/3	Must use
Description: Code (Standard ISO) for country in whose currency the charges are specified						

Syntax Rules:

1. C0807 - If CUR08 is present, then CUR07 is required.
2. C0907 - If CUR09 is present, then CUR07 is required.
3. L101112 - If CUR10 is present, then at least one of CUR11 or CUR12 is required.
4. C1110 - If CUR11 is present, then CUR10 is required.
5. C1210 - If CUR12 is present, then CUR10 is required.
6. L131415 - If CUR13 is present, then at least one of CUR14 or CUR15 is required.
7. C1413 - If CUR14 is present, then CUR13 is required.
8. C1513 - If CUR15 is present, then CUR13 is required.
9. L161718 - If CUR16 is present, then at least one of CUR17 or CUR18 is required.
10. C1716 - If CUR17 is present, then CUR16 is required.
11. C1816 - If CUR18 is present, then CUR16 is required.
12. L192021 - If CUR19 is present, then at least one of CUR20 or CUR21 is required.
13. C2019 - If CUR20 is present, then CUR19 is required.
14. C2119 - If CUR21 is present, then CUR19 is required.

Comments:

1. See Figures Appendix for examples detailing the use of the CUR segment.

REF Reference Identification

Pos: 050	Max: 12
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Must use
Description: Code qualifying the Reference Identification						
Code List Summary (Total Codes: 1503, Included: 2)						
		<u>Code</u>		<u>Name</u>		
		PK		Packing List Number		
		VN		Vendor Order Number		
REF02	127	Reference Identification	M	AN	1/30	Must use
Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier						

Syntax Rules:

1. R0203 - At least one of REF02 or REF03 is required.

Semantics:

- 1.

Comments:

1. REF|VN|71002051}

Loop Name

Pos: 070	Repeat: 200
Mandatory	
Loop: N1	Elements: N/A

User Option (Usage): Used

Purpose: To identify a party by type of organization, name, and code

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
070	N1	Name	M	1		Must use
080	N2	Additional Name Information	O	2		Used
090	N3	Address Information	M	2		Used
100	N4	Geographic Location	M	1		Used

Comments:

1. N1|ST|COMPANYNAME|92|1234}
2. N3|1234 W WAY LN}
3. N4|BLOOMINGTON|PA|12345|US}
4. N1|RE|DIGIKEY ELECTRONICS|92|HQ}
5. N3|701 BROOKS AVE|PO BOX 677}
6. N4|THIEF RIVER FALLS|MN|56701|US}

N1**Name**

Pos: 070	Max: 1
Heading - Mandatory	
Loop: N1	Elements: 4

User Option (Usage): Must use**Purpose:** To identify a party by type of organization, name, and code**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N101	98	Entity Identifier Code	M	ID	2/3	Must use
Description: Code identifying an organizational entity, a physical location, property or an individual						
Code List Summary (Total Codes: 1312, Included: 2)						
		<u>Code</u>		<u>Name</u>		
		RI		Remit To		
		ST		Ship To		
N102	93	Name	M	AN	1/60	Must use
Description: Free-form name						
N103	66	Identification Code Qualifier	X	ID	1/2	Used
Description: Code designating the system/method of code structure used for Identification Code (67)						
All valid standard codes are used. (Total Codes: 215)						
N104	67	Identification Code	X	AN	2/80	Used
Description: Code identifying a party or other code						

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. P0304 - If either N103 or N104 is present, then the other is required.

N2

Additional Name Information

Pos: 080	Max: 2
Heading - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used
Purpose: To specify additional names or those longer than 35 characters in length

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N201	93	Name	M	AN	1/60	Must use
		Description: Free-form name				
N202	93	Name	O	AN	1/60	Used
		Description: Free-form name				

N3 Address Information

Pos: 090	Max: 2
Heading - Mandatory	
Loop: N1	Elements: 2

User Option (Usage): Used
Purpose: To specify the location of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	Address Information	M	AN	1/55	Must use
		Description: Address information				
N302	166	Address Information	O	AN	1/55	Used
		Description: Address information				

N4 Geographic Location

Pos: 100	Max: 1
Heading - Mandatory	
Loop: N1	Elements: 4

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	City Name	M	AN	2/30	Must use
Description: Free-form text for city name						
N402	156	State or Province Code	M	ID	2/2	Used
Description: Code (Standard State/Province) as defined by appropriate government agency						
N403	116	Postal Code	M	ID	3/15	Used
Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)						
N404	26	Country Code	O	ID	2/3	Used
Description: Code identifying the country						

Syntax Rules:

1. C0605 - If N406 is present, then N405 is required.

Comments:

1. N402 is required only if city name (N401) is in the U.S. or Canada.

DTM Date/Time Reference

Pos: 140	Max: 10
Heading - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	Date/Time Qualifier	M	ID	3/3	Must use

Description: Code specifying type of date or time, or both date and time

Code List Summary (Total Codes: 1112, Included: 1)

Code	Name
011	Shipped

DTM02	373	Date	M	DT	8/8	Must use
-------	-----	------	---	----	-----	----------

Description: Date expressed as CCYYMMDD

Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.
2. C0403 - If DTM04 is present, then DTM03 is required.
3. P0506 - If either DTM05 or DTM06 is present, then the other is required.

Comments:

1. DTM|011|20211110}

Loop Baseline Item Data (Invoice)		Pos: 010	Repeat: 200000
		Optional	
		Loop: IT1	Elements: N/A

User Option (Usage): Used

Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	IT1	Baseline Item Data (Invoice)	O	1		Used
180		Loop SAC	O		25	Used

IT1**Baseline Item Data (Invoice)**

Pos: 010	Max: 1
Detail - Optional	
Loop: IT1	Elements: 13

User Option (Usage): Used**Purpose:** To specify the basic and most frequently used line item data for the invoice and related transactions**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IT101	350	Assigned Identification	M	AN	1/20	Used
		Description: Alphanumeric characters assigned for differentiation within a transaction set				
IT102	358	Quantity Invoiced	M	R	1/10	Used
		Description: Number of units invoiced (supplier units)				
IT103	355	Unit or Basis for Measurement Code	M	ID	2/2	Used
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		Code List Summary (Total Codes: 794, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		EA		Each		
IT104	212	Unit Price	M	R	1/17	Used
		Description: Price per unit of product, service, commodity, etc.				
IT105	639	Basis of Unit Price Code	M	ID	2/2	Used
		Description: Code identifying the type of unit price for an item				
		Code List Summary (Total Codes: 91, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		PE		Price per Each		
IT106	235	Product/Service ID Qualifier	M	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code List Summary (Total Codes: 477, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		VP		Vendor's (Seller's) Part Number		
IT107	234	Product/Service ID	M	AN	1/48	Used
		Description: Identifying number for a product or service				
IT108	235	Product/Service ID Qualifier	M	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code List Summary (Total Codes: 477, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		BP		Buyer's Part Number		
IT109	234	Product/Service ID	M	AN	1/48	Used
		Description: Identifying number for a product or service				
IT110	235	Product/Service ID Qualifier	X	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code List Summary (Total Codes: 477, Included: 1)				

		<u>Code</u>	<u>Name</u>				
		MG	Manufacturer's Part Number				
IT111	234	Product/Service ID		X	AN	1/48	Used
		Description: Identifying number for a product or service					
IT112	235	Product/Service ID Qualifier		X	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)					
		Code List Summary (Total Codes: 477, Included: 1)					
		<u>Code</u>	<u>Name</u>				
		MF	Manufacturer				
IT113	234	Product/Service ID		X	AN	1/48	Used
		Description: Identifying number for a product or service					

Syntax Rules:

1. P020304 - If either IT102, IT103 or IT104 are present, then the others are required.
2. P0607 - If either IT106 or IT107 is present, then the other is required.
3. P0809 - If either IT108 or IT109 is present, then the other is required.
4. P1011 - If either IT110 or IT111 is present, then the other is required.
5. P1213 - If either IT112 or IT113 is present, then the other is required.
6. P1415 - If either IT114 or IT115 is present, then the other is required.
7. P1617 - If either IT116 or IT117 is present, then the other is required.
8. P1819 - If either IT118 or IT119 is present, then the other is required.
9. P2021 - If either IT120 or IT121 is present, then the other is required.
10. P2223 - If either IT122 or IT123 is present, then the other is required.
11. P2425 - If either IT124 or IT125 is present, then the other is required.

Semantics:

1. IT101 is the purchase order line item identification.

Comments:

1. Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
2. IT1|1|250|EA|2.3224|PE|VP|LTC1844ES5-3.3#TRMPBFDKR-ND|BP|0848728|MG|LTC1844ES5-3.3#TRMPBF|MF|ANALOG DEVICES INC}

Loop Service, Promotion, Allowance, or Charge Information	Pos: 180 Optional Loop: SAC Repeat: 25 Elements: N/A
--	---

User Option (Usage): Used
Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
180	SAC	Service, Promotion, Allowance, or Charge Information	O	1		Used

Comments:

- 1. SAC|C|A122|||222|||||||06|||Tariff Charge~

SAC Service, Promotion, Allowance, or Charge Information

Pos: 180 Max: 1
Detail - Optional
Loop: SAC Elements: 5

User Option (Usage): Used

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC01	248	Allowance or Charge Indicator	M	ID	1/1	Must use

Description: Code which indicates an allowance or charge for the service specified

Code List Summary (Total Codes: 7, Included: 1)

<u>Code</u>	<u>Name</u>
C	Charge

SAC02	1300	Service, Promotion, Allowance, or Charge Code	X	ID	4/4	Used
-------	------	---	---	----	-----	------

Description: Code identifying the service, promotion, allowance, or charge

Code List Summary (Total Codes: 1053, Included: 1)

<u>Code</u>	<u>Name</u>
A122	Additional Tariff Classifications

SAC05	610	Amount	O	N2	1/15	Used
-------	-----	--------	---	----	------	------

Description: Monetary amount

SAC12	331	Allowance or Charge Method of Handling Code	O	ID	2/2	Used
-------	-----	---	---	----	-----	------

Description: Code indicating method of handling for an allowance or charge

Code List Summary (Total Codes: 22, Included: 1)

<u>Code</u>	<u>Name</u>
06	Charge to be Paid by Customer

SAC15	352	Description	X	AN	1/80	Used
-------	-----	-------------	---	----	------	------

Description: A free-form description to clarify the related data elements and their content

Syntax Rules:

1. R0203 - At least one of SAC02 or SAC03 is required.
2. P0304 - If either SAC03 or SAC04 is present, then the other is required.
3. P0607 - If either SAC06 or SAC07 is present, then the other is required.
4. P0910 - If either SAC09 or SAC10 is present, then the other is required.
5. C1110 - If SAC11 is present, then SAC10 is required.
6. L130204 - If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. C1413 - If SAC14 is present, then SAC13 is required.
8. C1615 - If SAC16 is present, then SAC15 is required.

Semantics:

1. If SAC01 is "A", then SAC05 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.

Comments:

1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

TDS	Total Monetary Value Summary	Pos: 010 Summary - Mandatory Loop: N/A	Max: 1 Elements: 1
------------	---	---	-------------------------------------

User Option (Usage): Must use
Purpose: To specify the total invoice discounts and amounts

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TDS01	610	Amount	M	N2	1/15	Must use
Description: Monetary amount						

Semantics:

- 1. TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).

Loop Service, Promotion, Allowance, or Charge Information	Pos: 040 Optional Repeat: 25 Loop: SAC Elements: N/A
--	--

User Option (Usage): Used
Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
040	SAC	Service, Promotion, Allowance, or Charge Information	O	1		Used

Comments:

- 1. SAC|C|D240|||222|||||06|||Freight~

SAC Service, Promotion, Allowance, or Charge Information

Pos: 040 Max: 1
Summary - Optional
Loop: SAC Elements: 5

User Option (Usage): Used

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC01	248	Allowance or Charge Indicator	M	ID	1/1	Must use
Description: Code which indicates an allowance or charge for the service specified						
Code List Summary (Total Codes: 7, Included: 1)						
		<u>Code</u> <u>Name</u>				
		C Charge				
SAC02	1300	Service, Promotion, Allowance, or Charge Code	X	ID	4/4	Used
Description: Code identifying the service, promotion, allowance, or charge						
Code List Summary (Total Codes: 1053, Included: 4)						
		<u>Code</u> <u>Name</u>				
		A122 Additional Tariff Classifications				
		C040 Delivery				
		D240 Freight				
		H850 Tax				
SAC06	378	Allowance/Charge Percent Qualifier	X	ID	1/1	Not used
Description: Code indicating on what basis allowance or charge percent is calculated						
All valid standard codes are used. (Total Codes: 11)						
SAC12	331	Allowance or Charge Method of Handling Code	O	ID	2/2	Used
Description: Code indicating method of handling for an allowance or charge						
Code List Summary (Total Codes: 22, Included: 3)						
		<u>Code</u> <u>Name</u>				
		05 Charge to be Paid by Vendor				
		06 Charge to be Paid by Customer				
		ZZ Mutually Defined				
SAC15	352	Description	X	AN	1/80	Used
Description: A free-form description to clarify the related data elements and their content						

Syntax Rules:

1. R0203 - At least one of SAC02 or SAC03 is required.
2. P0304 - If either SAC03 or SAC04 is present, then the other is required.
3. P0607 - If either SAC06 or SAC07 is present, then the other is required.
4. P0910 - If either SAC09 or SAC10 is present, then the other is required.
5. C1110 - If SAC11 is present, then SAC10 is required.
6. L130204 - If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. C1413 - If SAC14 is present, then SAC13 is required.
8. C1615 - If SAC16 is present, then SAC15 is required.

Semantics:

1. If SAC01 is "A", then SAC05 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.

Comments:

- 1.

CTT Transaction Totals

Pos: 070	Max: 1
Summary - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

Purpose: To transmit a hash total for a specific element in the transaction set

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	Number of Line Items	M	N0	1/6	Must use

Description: Total number of line items in the transaction set

CTT02	347	Hash Total	O	R	1/10	Used
-------	-----	------------	---	---	------	------

Description: Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.

Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.
2. CTT|1|1234}

SE**Transaction Set Trailer**

Pos: 080	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use**Purpose:** To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	Number of Included Segments	M	N0	1/10	Must use
Description: Total number of segments included in a transaction set including ST and SE segments						
SE02	329	Transaction Set Control Number	M	AN	4/9	Must use
Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set						

Comments:

1. SE is the last segment of each transaction set.
2. SE|18|0001}

GE Functional Group Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

Purpose: To indicate the end of a functional group and to provide control information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GE01	97	Number of Transaction Sets Included	M	NO	1/6	Must use
Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element						
GE02	28	Group Control Number	M	NO	1/9	Must use
Description: Assigned number originated and maintained by the sender						

Semantics:

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

Comments:

1. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.
2. GE|1|9465597}

IEA Interchange Control Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IEA01	I16	Number of Included Functional Groups	M	N0	1/5	Must use
Description: A count of the number of functional groups included in an interchange						
IEA02	I12	Interchange Control Number	M	N0	9/9	Must use
Description: A control number assigned by the interchange sender						

Comments:

1. IEA|1|009465597}

EDI Sample

```

ISA|00| |00| |ZZ|1234567890 |ZZ|987654321 |211110|0724|U|00401|009465597|0|P|^}
GS|IN|2186816674|COMPANYGS|20211110|0724|9465597|X|004010}
ST|810|0001}
BIG|20211110|85311062|20210730|2749741}
CUR|BY|USD}
REF|VN|71002051}
REF|11|92335}
N1|ST|SHIP COMPANY NAME|92|1234}
N3|123 RIGHT WAY CT}
N4|CITYINCA|BC|V5J5H6|CA}
N1|BT|BILLING COMPANY NAME|92|HQ}
N3|ACCOUNTS PAYABLE|365 BILL STREET W}
N4|BILL CITY|BC|V5J5J2|CA}
DTM|011|20211110}
IT1|2|250|EA|2.3224|PE| VP|LTC1844ES5-3.3#TRMPBFDKR-ND|BP|0848728| MG|LTC1844ES5-
3.3#TRMPBF|MF|ANALOG
DEVICES INC}
SAC|C|H850|||222|||||06|||Tax}
IT1|10|1|EA|2.00|PE|VP|OAI-80038AA-2011-A-ND|BP|333652|MG|OAI-80038AA-2011-A|MF|3M}
SAC|C|A122|||222|||||06|||Tariff}
TDS|58060}
SAC|C|D240|||222|||||06|||Freight}
SAC|C|H850|||222|||||06|||Tax}
SAC|C|A122|||222|||||06|||Tariff}
CTT|1|66656}
SE|18|0001}
GE|1|9465597}
IEA|1|009465597}

```