Invoice

Transaction Set (810)

(Outbound from TI)

ANSI X12 Version Format: 3020
Date: October 1996

Testing Procedures

- To begin testing a request needs to be made to the TI SC EDI Business Manager, Kim Harlow, at (214) 480-7982 (kharlow@ti.com) prior to sending any transmissions.

- A TI EDI Representative will contact you to begin testing.

- You will send a valid test file to Texas Instruments and notify us when it has been sent. A valid test file consists of:
  - 'T' sent in the ISA segment (ISA15)
  - Must contain all mandatory segments and fields contained in this documentation
  - Standard pack quantities

- Texas Instruments will review your transmissions and notify you of any problems.

- Move to production
  - TI SC EDI Business Manager, TI EDI Representative and the trading partner are mutually satisfied with the data being transmitted
  - TI EDI Representative will contact you to move you into production
  - 'P' sent in ISA segment (ISA15)

How To Use This Documentation

This document was created to aid in your implementation of the ANSI 2003 standard for invoices. This documentation contains those segments and elements that will be sent for the invoices created by Texas Instruments.

A complete description of the invoice segments are outlined in the ANSI 2003 Standards Manual. If you require/need to be sent additional segments not listed in this documentation, an agreement must be reached with Texas Instruments.

Data Element Attributes

M = Mandatory (must be transmitted)
C = Conditional (presence of this field is dependent on the value or presence of other data elements within the segment)
O = Optional (the appearance of the element is either at the option of the sending party or based on agreement between the trading partners)

Data Element Types

AN = Alphanumeric
NN = Numeric
    1st N signifies numeric
    2nd N signifies the number of decimal places to the right of a fixed, implied decimal point (the decimal point is not transmitted for this data element type)
R = Numeric Decimal (decimal point required to be transmitted when fractional values are present)
ID = Field contains a code value (codes are contained within predetermined lists maintained by the standards committee and are found in the appendix of ANSI manuals)
DT = Date formatted in YYMMDD, where
    YY = Last 2 digits of the year (00-99)
    MM = Numeric month (01-12)
    DD = Numeric day (01-31)
TM = Time formatted in HHMM, where
    HH = Military hour (00-23)
    MM = Minute (00-59)

Data Element Length

- The number to the left of the "/" specifies the minimum length of the field as required by the standard.
- The number to the right of the "/" specifies the maximum length of the field as required by the standard.
- When the minimum and maximum lengths are the same, this signifies the field has a fixed length.
- The minimum and maximum lengths do not include the decimal point (when data element is R).

Invoice (810) - Outbound

The invoice transaction set provides for customary and established business and industry practice relative to the billing for goods and services provided.

SEG. ID	NAME	REQ.DES.	MAX USE	LOOP REPEAT
ISA	Interchange Control Header	M	1	
GS	Functional Group Header	M	1	
ST	Transaction Set Header	M	1	
BIG	Beginning Segment (Invoice)	M	1	
LOOP ID - N1				
N1	Name	O	1	200
ITD	Terms of Sale/Deferred Terms of Sale	O	5	
DTM	Date/Time Reference	O	10	
FOB	F.O.B. Related Instructions	O	1	
LOOP ID - IT1				
IT1	Baseline Item Data (Invoice)	O	1	200,000
REF	Reference Numbers	O	>1	
TDS	Total Monetary Value Summary	M	1	
TXI	Tax Information	O	10	
CAD	Carrier Detail	O	1	
LOOP ID -ITA				
ITA	Allowance, Charge or Service	O	1	10
CTT	Transaction Totals	M	1	
SE	Transaction Set Trailer	M	1	
GE	Functional Group Trailer	M	1	
IEA	Interchange Control Trailer	M	1	

ISA - Interchange Control Header

Status: Mandatory

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

Field #	Element	Field Name	Req.	Type	Size	TI Usage
ISA01	I01	Authorization Information Qualifier	M	ID	2/2	00 - No Authorization Information Present 01 - UCS Communications ID
ISA02	I02	Authorization Information	M	AN	10/10	Supplied by TI if using direct dial service
ISA03	I03	Security Information Qualifier	M	ID	2/2	00 - No Security Information Present 01 - Password
ISA04	I04	Security Information	M	AN	10/10	Supplied by TI if using direct dial service
ISA05	I05	Interchange ID Qualifier	M	ID	2/2	TI accepts all; TI uses 01 - DUNS (Dun & Bradstreet)
ISA06	I06	Interchange Sender ID	M	ID	15/15	Defined by Sender
ISA07	I05	Interchange ID Qualifier	M	ID	2/2	TI accepts all; TI uses 01 - DUNS (Dun & Bradstreet)
ISA08	I07	Interchange Receiver ID	M	ID	15/15	Defined by Receiver
ISA09	I08	Interchange Date	M	DT	6/6	Current Date: YYMMDD
ISA10	I09	Interchange Time	M	TM	4/4	Current Time: HHMM
ISA11	I10	Interchange Standards ID	M	ID	1/1	U - American National Standards Committee X12
ISA12	I11	Interchange Version ID	M	ID	5/5	This version number covers X12 control segments only. Positions 1-3 = major version number; positions 4-5 = release level of the version.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
ISA13	I12	Interchange Control Number	M	N0	9/9	This number is assigned by sender; together with sender ID, it uniquely identifies interchange data to receiver. It is suggested that sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.
ISA14	I13	Acknowledgment Requested	M	ID	1/1	0 - No Acknowledgment Requested 1 - Interchange Acknowledgment Requested
ISA15	I14	Test Indicator	M	ID	1/1	T - Test Data P - Production Data
ISA16	I15	Sub Element Separator	M	AN	1/1	Defined by Sender

GS - Functional Group Header

Status: Mandatory

Purpose: To start and identify a functional group of related transaction sets and provide control and application identification information.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
GS01	479	Functional ID Code	M	ID	2/2	Code identifying a group of application related transaction sets
GS02	142	Application Sender's Code	M	ID	2/12	Defined by Sender
GS03	124	Application Receiver's Code	M	ID	2/12	Defined by Receiver
GS04	29	Data Interchange Date	M	DT	6/6	Date sender generated a functional group of transaction sets. Format: YYMMDD
GS05	30	Data Interchange Time	M	TM	4/4	Time expressed in 24-hour clock time when the sender generated a functional group of transaction sets (local time at sender's location). Format HHMM
GS06	28	Data Interchange Control Number	M	N0	1/9	Sequentially assigned by sender
GS07	455	Responsible Agency Code	M	ID	1/2	X - Accredited Standards Committee X12
GS08	480	Version/Release/ Industry ID Code	M	ID	1/12	Code indicating the version, release, and industry ID of the EDI standard being used. Positions 1 - 3 = major version number; positions 4 - 6 = release number.

ST - Transaction Set Header

Status: Mandatory

Purpose: The first segment of each transaction set, containing the transaction set identifier and control numbers.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
ST01	143	Transaction Set ID Code	M	ID	3/3	810 - Invoice
ST02	329	Transaction Set Control Number	M	AN	4/9	The control number is assigned by the sender. It should be sequentially assigned within each functional group to aid in error recovery and research. The control number in the SE segment (SE02) must be identical to the control number in the ST segment for each transaction.

BIG - Beginning Segment (Invoice)

Status: Mandatory

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

Field #	Element	Field Name	Req.	Type	Size	TI Usage
BIG01	245	Invoice Date	M	DT	6/6	Invoice Date (YYMMDD)
BIG02	76	Invoice Number	M	AN	1/22	Invoice Number
BIG03	323	Purchase Order Date	O	DT	6/6	Purchase Order Date (YYMMDD)
BIG04	324	Purchase Order Number	O	AN	1/22	Purchase Order Number
BIG05	328	Release Number	O	AN	1/30	Not Used
BIG06	327	Change Order Sequence Number	O	AN	1/8	Not Used
BIG07	640	Transaction Type Code	O	ID	2/2	PR - Product or Service CR - Credit Memo DR - Debit Memo

NOTE: BIG03 is actually the TI order entry date.

N1 - Name

Status: Optional

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

Field #	Element	Field Name	Req.	Type	Size	TI Usage
N101	98	Entity ID Code	M	ID	2/2	BY - Buying Party ST - Ship To RE - Remittance BT - Bill To
N102	93	Name	C	AN	1/35	Buyer's Name
N103	66	ID Code Qualifier	C	ID	1/2	1 - Dun & Bradstreet 91 - TI Customer's ID Number 92 - Sender's Internal Customer ID Number
N104	67	ID Code	C	ID	2/17	Number qualified by N103

ITD - Terms of Sale/Deferred Terms of Sale

Status: Optional

Purpose: To specify terms of sale.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
ITD01	336	Terms Type Code	O	ID	2/2	01 - Basic 08 - Basic - Discount Offered
ITD02	333	Terms Basis Date Code	M	ID	1/2	3 - Invoice Date
ITD03	338	Terms Discount Percent	C	R	1/6	Discount Percent if discount is applicable
ITD04	370	Terms Discount Due Date	C	DT	6/6	Not Used
ITD05	351	Terms Discount Days Due	C	N0	1/3	Number of Days
ITD06	446	Terms Net Due Date	C	DT	6/6	Not Used
ITD07	386	Terms Net Days	C	N0	1/3	Number of Days
ITD08	362	Terms Discount Amount	C	N2	1/10	Not Used
ITD09	388	Terms Deferred Due Date	O	DT	6/6	Not Used
ITD10	389	Deferred Amount Due	C	N2	1/10	Not Used
ITD11	342	Percent Invoice Payable	C	R	1/5	Not Used
ITD12	352	Description	C	AN	1/80	Text Description of Terms
ITD13	765	Day of Month	C	N0	1/2	Not Used

DTM - Date/Time Reference

Status: Optional

Purpose: To specify pertinent dates and times.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
DTM01	374	Date/Time Qualifier	M	ID	3/3	011 - Date Shipped
DTM02	373	Date	C	DT	6/6	Date Shipped (YYMMDD)
DTM03	337	Time	C	TM	4/4	Not Used
DTM04	623	Time Zone Qualifier	O	ID	2/2	Not Used

FOB - F.O.B. Related Instructions

Status: Optional

Purpose: To specify transportation instructions relating to shipment.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
FOB01	146	Shipment Method of Payment	M	ID	2/2	DF - Defined by Buyer/Seller CC - Collect PC - Prepaid but Charged to Customer PP - Prepaid by Seller
FOB02	309	Location Qualifier	C	ID	1/2	Not Used
FOB03	352	Description	O	AN	1/80	Not Used
FOB04	334	Transportation Terms Qualifier Code	O	ID	2/2	ZZ - Mutually Defined
FOB05	335	Transportation Terms Code	C	ID	3/6	Not Used
FOB06	309	Location Qualifier	C	ID	1/2	Not Used
FOB07	352	Description	O	AN	1/80	Not Used

IT1 - Baseline Item Data (Invoice)

Status: Optional

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

Field #	Element	Field Name	Req.	Type	Size	TI Usage
IT101	350	Assigned Identification	O	AN	1/6	Item Number
IT102	358	Quantity Invoiced	M	R	1/10	Quantity Invoiced
IT103	355	Unit of Measure Code	M	ID	2/2	EA - Each
IT104	212	Unit Price	M	R	1/14	Unit Price
IT105	639	Basis Unit Price Code	O	ID	2/2	PE - Price Per Each
IT106	235	Product/Service ID Qualifier	O	ID	2/2	BP - Buyer's Part Number
IT107	234	Product/Service ID	C	AN	1/30	Customer Part Number
IT108	235	Product/Service ID Qualifier	O	ID	2/2	VP - Vendor's Part Number
IT109	234	Product/Service ID	C	AN	1/30	TI Part Number

NOTE: IT110 through IT125 are not used

REF - Reference Numbers

Status: Optional

Purpose: To transmit identifying numbers.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
REF01	128	Reference Number Qualifier	M	ID	2/2	PK - Packing List Number VN - Vendor's Order Number
REF02	127	Reference Number	C	AN	1/30	Reference Number Qualified by REF01
REF03	352	Description	C	AN	1/30	Not Used

TDS - Total Monetary Value Summary

Status: Mandatory

Purpose: To specify the total invoice discounts and amounts.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
TDS01	361	Total Invoice Amount	M	N2	1/10	Total Amount Due

NOTE: TDS02 through TDS04 are not used.

TXI - Tax Information

Status: Optional

Purpose: Tospecify tax information.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
TXI01	963	Tax Type Code	M	ID	2/2	LS - Local and State Sales Tax VA- Value Added Tax
TXI02	782	Monetary Amount	C	R	1/15	Tax Amount

NOTE: TXI03 through TXI06 are not used.

CAD - Carrier Detail

Status: Optional

Purpose: To specify transportation details for the transaction.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
CAD01	91	Transportation Method Mode	O	ID	1/2	A - Air R - Rail M - Motor S - Ocean AE - Air Express VA - Motor (Van)
CAD02	206	Equipment Initial	O	AN	1/4	Not Used
CAD03	207	Equipment Number	O	AN	1/10	Not Used
CAD04	140	Standard Carrier Alpha Code	C	ID	2/4	Not Used
CAD05	387	Routing	C	AN	1/35	Carrier Name
CAD06	368	Ship/Order Status Code	O	ID	2/2	Not Used
CAD07	128	Reference Number Qualifier	O	ID	2/2	BM - Bill of Lading
CAD08	127	Reference Number	O	AN	1/30	Bill of Lading Number

ITA - Allowance, Charge or Service

Status: Optional

Purpose: To specify allowances, charges or services.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
ITA01	248	Allowance/Charge Indicator	M	ID	1/1	C - Charge
ITA02	559	Agency Qualifier Code	O	ID	2/2	Not Used
ITA03	560	Special Service Code	C	ID	2/10	FC- Freight SH - Special Handling (not EIDX) IN - Insurance (not EIDX) I0021 - Inspection (not EIDX) HC - Handling DL - Delivery (not EIDX) ZZ - Mutually Defined (not EIDX)
ITA04	331	Method of Handling Code	M	ID	2/2	06 - Charge to be Paid by Customer
ITA05	341	Allowance or Charge Number	O	AN	1/16	Not Used
ITA06	359	Allowance Charge Rate	C	R	1/9	Not Used
ITA07	360	Allowance or Charge Total Amount	C	N2	1/9	Amount of Charge

NOTE: ITA08 through ITA14 are not used.

CTT - Transaction Totals

Status: Mandatory

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

Field #	Element	Field Name	Req.	Type	Size	TI Usage
CTT01	354	Number of Line Items	M	N0	1/6	Number of line item segments in this transaction set

NOTE: CTT02 through CTT07 are not used.

SE - Transaction Set Trailer

Status: Mandatory

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.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
SE01	96	Number of Included Segments	M	N0	1/6	The total number of all segments in the transaction set, including the ST and SE segments.
SE02	329	Transaction Set Control Number	M	AN	4/9	The control number is assigned by the sender. It should be sequentially assigned within each functional group to aid in error recovery and research. The control number in the SE segment must be identical to the control number in the ST segment (ST02) for each transaction.

GE - Functional Group Trailer

Status: Mandatory

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

Field #	Element	Field Name	Req.	Type	Size	TI Usage
GE01	97	Number of Included Transaction Sets	M	N0	1/6	The total number of transaction sets included.
GE02	28	Data Interchange Control Number	M	N0	1/9	The data interchange control number must match the same data element (GS06) in the functional group header segment.

IEA - Interchange Control Trailer

Status: Mandatory

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

Field #	Element	Field Name	Req.	Type	Size	TI Usage
IEA01	I16	Number of Included Groups	M	N0	1/5	A count of the number of functional groups included in a transmission.
IEA02	I12	Interchange Control Number	M	N0	9/9	This number is assigned by sender; together with sender ID, it uniquely identifies interchange data to receiver. It is suggested that sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.