

846 Inventory Inquiry / Advice_Inbound

846 ANSI X12 004010

Version: 1.1

Publication: 01.24.2013

Version Number	Version Date	Description of Change	Reason of Change	Author	Change Reference
1.0	01.24.2013	Initial release	Original Document	Adrian Birau	All Sections
1.1	02.07.2013	Add Samples		Adrian Birau	Samples

Table of Contents

- 846 3
- ST Transaction Set Header 4
- BIA Beginning Segment for Inventory Inquiry/Advice 5
- REF Reference Identification 6
- Loop N1 7
- Loop LIN 9
- Loop QTY 12
- Loop N1 14
- CTT Transaction Totals 16
- SE Transaction Set Trailer 17
- Sample 17

846 Inventory Inquiry/Advice

Functional Group = IB

This Draft Standard for Trial Use contains the format and establishes the data contents of the Inventory Inquiry/Advice Transaction Set (846) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used in the following ways: (1) for a seller of goods and services to provide inventory information to a prospective purchaser, with no obligation to the purchaser to acquire these goods or services; (2) for a representative of a seller of goods and services to supply inventory information to that seller; (3) for one location to supply another location with inventory information; and (4) for an inquiry as to the availability of inventory with no obligation on the seller of goods and services to reserve that inventory.

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	BIA	Beginning Segment for Inventory Inquiry/Advice	M	1			Must use
060	REF	Reference Identification	O	12			Used
LOOP ID - N1					<u>5</u>		
080	N1	Name	O	1			Used
100	N3	Address Information	O	2			Used
110	N4	Geographic Location	O	1			Used

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>
LOOP ID - LIN					<u>10000</u>		

Summary:

480	N4	Geographic Location	O	1			Used
010	LIN	Item Identification	M	1			Must use
030	PID	Product/Item Description	O	200			Used
LOOP ID - QTY					<u>99</u>		
320	QTY	Quantity	O	1			Used
350	LDT	Lead Time	O	12			Used
LOOP ID - N1					<u>200</u>		
450	N1	Name	O	1			Used
470	N3	Address Information	O	2			Used
<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	CTT	Transaction Totals	O	1		N3/010	Used
020	SE	Transaction Set Trailer	M	1			Must use

Notes:

- 3/010 Number of line items (CTT01) is the accumulation of number of LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (QTY02) of each QTY segment.

ST Transaction Set Header

User Option (Usage):

Must use

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 Description: Code uniquely identifying a Transaction Set "846" - Inventory Inquiry/Advice	M	ID	3/3	Must use
ST02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set Semantics:	M	AN	4/9	Must use

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).

BIA Beginning Segment for Inventory Inquiry/Advice

User Option (Usage):

Must use

To indicate the beginning of an Inventory Inquiry/Advice Transaction Set

Element Summary:

Ref Id	Element Name	Req	Type	Usage	BIA01 353 Transaction Set Purpose Code	M	ID	Must use	Min/Max
				Description: Code identifying purpose of transaction set "00" - Original "01" - Cancellation "04" - Change					2/2
BIA02	755			Report Type Code Description: Code indicating the title or contents of a document, report or supporting item "LC" - Location Inventory Report "CM" - Customer/Manufacturer Inventory Report "DM" - Distributor/Manufacturer Inventory Report "MM" - Manufacturer Inventory Report		M	ID		2/2 Must use
BIA03	127			Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		M	AN		1/30 Must use
BIA04	373			Date Description: Date expressed as CCYYMMDD Effective Inventory Date (Not Transmission date)		M	DT		8/8 Must use
BIA05	337			Time 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) Semantics:					

1. BIA03 identifies the number of the inquiry/advice that is transferred.

O TM 4/8 Used

REF Reference Identification

User Option (Usage):

Used
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 Description: Code qualifying the Reference Identification “ZZ” - Mutually Defined	M	ID	2/3	Must use
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Used
REF03	352	Hub SMI Code (Flextronics Assigned) Description Description: A free-form description to clarify the related data elements and their content	X	AN	1/80	Used

Syntax:

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

Semantics:

1. REF04 contains data relating to the value cited in REF02.

Loop N1

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>
080	N1	Name	O	1		Used
100	N3	Address Information	O	2		Used
110	N4	Geographic Location	O	1		Used

N1 Name

User Option (Usage):

Used

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 Description: Code identifying an organizational entity, a physical location, property or an individual "BY" - Buying Party (Purchaser) "LG" - Location of Goods "WH" - Warehouse "SE" - Selling Party "CN" - Consignee "DS" - Distributor	M	ID Must use	2/3	
N102	93	Name Description: Free-form name	X	AN	1/60	Used
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67) "1" - D-U-N-S Number, Dun & Bradstreet "9" - D-U-N-S+4, D-U-N-S Number with Four Character Suffix "91" - Assigned by Seller or Seller's Agent "92" - Assigned by Buyer or Buyer's Agent	X	ID	1/2	Used
N104	67	Identification Code Description: Code identifying a party or other code	X	AN	2/80	Used

Syntax:

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

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

N3 Address Information

User Option (Usage):

Used

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 Description: Address information	M	AN	Must use 1/55	
N302	166	Address Information Description: Address information	O	AN	1/55	Used

N4 Geographic Location

User Option (Usage):

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

Syntax:

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

Comments:

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.

Loop LIN

To specify basic item identification data **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	LIN	Item Identification	M	1		Must use
030	PID	Product/Item Description	O	200		Used
060	REF	Reference Identification	O	12		Used
320		Loop QTY	O		99	Used
450		Loop N1	O		200	Used

LIN Item Identification

User Option (Usage):

Must use

To specify basic item identification data

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>
LIN01	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	O	AN Used	1/20	
LIN02	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) “BP” - Buyer’s Part Number	M	ID	2/2	Must use
LIN03	234	Product/Service ID Description: Identifying number for a product or service	M	AN	1/48	Must use
LIN04	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) “MG” - Manufacturer’s Part Number	X	ID	2/2	Used
LIN05	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used
LIN06	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) “EC” - Engineering Change Level	X	ID	2/2	Used
LIN07	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used
LIN08	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) “MF” – Manufacturer	X	ID	2/2	Used
LIN09	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used

Syntax:

1. P0405 - If either LIN04,LIN05 is present, then all are required
2. P0607 - If either LIN06,LIN07 is present, then all are required
3. P0809 - If either LIN08,LIN09 is present, then all are required
4. P1011 - If either LIN10,LIN11 is present, then all are required

5. P1213 - If either LIN12,LIN13 is present, then all are required 6.
P1415 - If either LIN14,LIN15 is present, then all are required
7. P1617 - If either LIN16,LIN17 is present, then all are required
8. P1819 - If either LIN18,LIN19 is present, then all are required
9. P2021 - If either LIN20,LIN21 is present, then all are required
10. P2223 - If either LIN22,LIN23 is present, then all are required
11. P2425 - If either LIN24,LIN25 is present, then all are required
12. P2627 - If either LIN26,LIN27 is present, then all are required
13. P2829 - If either LIN28,LIN29 is present, then all are required
14. P3031 - If either LIN30,LIN31 is present, then all are required

Semantics:

1. LIN01 is the line item identification

PID Product/Item Description

User Option (Usage):

Used

To describe a product or process in coded or free-form format

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>
PID01	349	Item Description Type Description: Code indicating the format of a description "F" - Free-form	M	ID	1/1	Must use
PID05	352	Description Description: A free-form description to clarify the related data elements and their content	X	AN	1/80	Used

Syntax:

1. C0403 - If PID04 is present, then all of PID03 are required
2. R0405 - At least one of PID04,PID05 is required
3. C0703 - If PID07 is present, then all of PID03 are required 4. C0804 - If PID08 is present, then all of PID04 are required
5. C0905 - If PID09 is present, then all of PID05 are required

Semantics:

1. Use PID03 to indicate the organization that publishes the code list being referred to.
2. PID04 should be used for industry-specific product description codes.
3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
4. PID09 is used to identify the language being used in PID05.

Comments:

1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
3. PID07 specifies the individual code list of the agency specified in PID03.

REF Reference Identification

User Option (Usage):

Used

To

speci

fy
identi
fying
infor
matio
n

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 Description: Code qualifying the Reference Identification "VR" – Vendor Code	M	ID	2/3	Must use
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Must Use
REF03	352	Supplier Code (Flextronics Used) Description Description: A free-form description to clarify the related data elements and their content	X	AN	1/80	Used

Syntax:

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

Semantics:

1. REF04 contains data relating to the value cited in REF02.

Loop QTY

To specify quantity information

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>
320	QTY	Quantity	O	1		Used
350	LDT	Lead Time	O	12		Used

QTY Quantity

User Option (Usage): Used

To specify quantity 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>
QTY01	673	Quantity Qualifier Description: Code specifying the type of quantity "17" - Quantity on Hand "26" - Total Inventory "25" - OEM Inventory "72" - Minimum Stock Level "73" - Maximum Stock Level "33" - Quantity Available for Sale (stock quantity) NOTE: Flex used as "Quarantined Stock" "37" - Work In Process	M	ID Must use	2/2	
QTY02	380	Quantity Description: Numeric value of quantity	X	R	1/15	Used
QTY03	C001	Composite Unit of Measure Description: To identify a composite unit of measure(See Figures Appendix for examples of use)	O	Comp		Used
	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken All valid standard codes are used.	M	ID	2/2	Must use

Syntax:

1. R0204 - At least one of QTY02,QTY04 is required
2. E0204 - Only one of QTY02,QTY04 may be presented

Semantics:

1. QTY04 is used when the quantity is non-numeric.

LDT Lead Time

User Option (Usage):

Used

To specify lead time for availability of products and services

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>
LDT01	345	Lead Time Code Description: Code indicating the time range “AE” - From date of PO receipt to shipment	M	ID Must use	2/2	
LDT02	380	Quantity Description: Numeric value of quantity	M	R	1/15	Must use
LDT03	344	Unit of Time Period or Interval Description: Code indicating the time period or interval “WK” - Weeks “DA” - Calendar Days	M	ID	2/2	Must use

Semantics:

1. LDT04 is the effective date of lead time information.

Comments:

1. LDT02 is the quantity of unit of time periods.

Loop N1

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>
450	N1	Name	O	1		Used
470	N3	Address Information	O	2		Used
480	N4	Geographic Location	O	1		Used

N1 Name

User Option (Usage):

Used

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 Description: Code identifying an organizational entity, a physical location, property or an individual “WH” – Warehouse “LG” - Location of Goods	M	ID Must use	2/3	
N102	93	Name Description: Free-form name	X	AN	1/60	Used
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67) “9” - D-U-N-S+4, D-U-N-S Number with Four Character Suffix “91” - Assigned by Seller or Seller's “92” - Assigned by Buyer or Buyer's Agent	X	ID	1/2	Used
N104	67	Identification Code Description: Code identifying a party or other code	X	AN	2/80	Used

Syntax:

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

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

N3 Address Information

User Option (Usage):

Used
To specify the location of the named party

Element Summary:

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

N4 Geographic Location

User Option (Usage):

Used
To specify the geographic place of the named party

Element Summary:

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

Syntax:

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

Comments:

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. N402 is required only if city name (N401) is in the U.S. or Canada.

CTT Transaction Totals

User Option (Usage):

Used

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 Description: Total number of line items in the transaction set	M	N0	1/6	Must use
CTT02	347	Hash Total 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 threedigit field.	O	R	1/10	Used

Syntax:

1. P0304 - If either CTT03,CTT04 is present, then all are required
2. P0506 - If either CTT05,CTT06 is present, then all are required

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

SE Transaction Set Trailer

User Option (Usage):

Must use

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 Description: Total number of segments included in a transaction set including ST and SE segments	M	NO	1/10	Must use
SE02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

Comments:

- SE is the last segment of each transaction set.

Sample

```
ISA*00* 00* *supplier qual*supplier ISA ID *ZZ*941714834VANP *130205*0622*U*00401*000001068*0*P*:  
GS*IA*supplier GS ID*9417148340059*20130205*0622*1068*X*004010  
ST*846*10680001  
BIA*00*LC*020513*20130205  
DTM*097*20130205*0530 REF*VR*1SP000734  
N1*SE*Selling Party Name  
LIN*00001*BP*SUN4F-419631102  
QTY*33*18*EA LIN*00002*BP*SUN4F-419801001  
QTY*33*21*EA LIN*00003*BP*SUN4F-419802602  
QTY*33*19*EA  
CTT*3  
SE*13*10680001  
GE*1*1068  
IEA*1*000001068
```

For more information, please visit
www.flextronics.com

Flextronics is a leading Electronics Manufacturing Services (EMS) provider that offers complete design, engineering, and manufacturing services to aerospace, automotive, computing, consumer digital, industrial, infrastructure, medical and mobile OEM customers. With a network of facilities in 30 countries, Flextronics helps customers design, manufacture, distribute and service electronics products worldwide.

Copyright © 2012, Flextronics. All rights reserved. No part of this document may be reproduced in any form without the prior written permission of Flextronics.