



**SANMINA
CORPORATION**

**Traditional Ship Notice/Manifest
INBOUND**

856

VERSION

004010

Prepared By: Sanmina Information Technology & Services

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Version : 10

856 Ship Notice/Manifest

Functional Group ID=**SH**

Introduction:

This standard contains the format and establishes the data contents of the Invoice Transaction Set (856) 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.

Heading:

Pos. No.	Seg. ID	Name	X12 Req.	Sanmina Required	Max.Use	Loop Repeat	Notes and Comments
010	ST	Transaction Set Header	M	M	1		
020	BSN	Beginning Segment for Invoice	M	M	1		
040	DTM	Date/Time Reference	O	M	10		

Shipping:

Pos. No.	Seg. ID	Name	X12 Req.	Sanmina Required	Max.Use	Loop Repeat	Notes and Comments
		LOOP ID – HL				1	
010	HL	Hierarchical Level (Shipment)	M	M	1		
080	MEA	Measurements	O	O	40		
120	TD5	Carrier Details	M	M	12		
150	REF	Reference Identification	O	M	>1		
		LOOP ID – N1				200	
220	N1	Name	O	M	1		

Item:

Pos. No.	Seg. ID	Name	X12 Req.	Sanmina Required	Max.Use	Loop Repeat	Notes and Comments
		LOOP ID – HL				199999	
010	HL	Hierarchical Level (Item)	M	M	1		
020	LIN	Item Identification	O	M	1		
030	SN1	Item Detail (Shipment)	O	M	1		
050	PRF	Purchase Order Reference	O	M	1		

Summary:

Pos. No.	Seg. ID	Name	X12 Req.	Sanmina Required	Max.Use	Loop Repeat	Notes and Comments
010	CTT	Transaction Totals	O	M	1		N1
020	SE	Transaction Set Trailer	M	M	1		

Transaction Set Notes

1. Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.
2. The HL segment is the only mandatory segment within the HL loop, and by itself, the segment has no meaning.

Available characters: A-Z, a-z, 0-9, ., -, +, {, }, [,], 9, 0, :, ;, %, |, <, >, !, ", \$, ~, ^, &, #, =, |, @

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level: Heading
X12 Usage: Mandatory
Sanmina Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes: 1 The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 856 Ship Notice/Manifest).
Comments:

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 856 Ship Notice/Manifest	ID 3/3
Must Use	ST02	329	Transaction Set Control Number Identifying control number assigned by the originator for a transaction set.	AN 4/9

ST~856~0008 }

Segment: **BSN** Beginning Segment for Ship Notice
Position: 020
Loop:
Level: Heading
X12 Usage: Mandatory
Sanmina Usage: Mandatory
Max Use: 1
Purpose: To transmit identifying numbers, dates and other basic data relating to the transaction set.
Syntax Notes:
Semantic Notes:

- 1 BSN03 is the date the shipment transaction set is created.
- 2 BSN04 is the time the shipment transaction set is created.

Comments:

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BSN01	353	Transaction Set Purpose Code Code identifying purpose of transaction set. 00 Original	ID 2/2
Must Use	BSN02	396	Shipment Identification A unique control number assigned by the original shipper to identify a specific shipment	AN 2/30
Must Use	BSN03	373	Date Date expressed as CCYYMMDD	DT 8/8
Must Use	BSN04	337	Time GMT Time expressed in 24-hour clock time as follows. HHMMSS	TM 4/8

BSN~00~1206670124~20140804~102846}

Segment: **DTM** Date/Time Reference
Position: 040
Loop:
Level: Heading
X12 Usage: Optional
Sanmina Usage: Mandatory
Max Use: >1
Purpose: To specify pertinent dates and times
Syntax Notes:

- 1 At least one of DTM02 or DTM03
- 2 If DTM04 is present, then DTM03 is required.

Semantic Notes:
Comments:

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time. 011 Shipped Date (Must Use) 017 Delivery Date (Optional)	ID 3/3
Must Use	DTM02	373	Date Date expressed as CCYYMMDD Date product was shipped to Sanmina.	8/8
Must Use	DTM03	337	Time Time expressed as HHMMSS	TM 4/8
Must Use	DTM04	623	Time Code GM Greenwich Mean Time	ID 2/2

DTM~011~20140804~102846~GM}
 DTM~017~20140809~102846~GM}

Segment: **HL** Hierarchical Level
Position: 010
Loop: HL
Level: Shipping
X12 Usage: Mandatory
Sanmina Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments.

Syntax Notes:

Semantic Notes:

Comments:

- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
- 2 The HL segment defines a top down/left-right ordered structure.
- 3 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set.
- 4 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	HL01	628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure.	AN 1/12
	HL02	734	Hierarchical Parent ID Number Code defining the characteristic of a hierarchical structure	AN 1/12
Must Use	HL03	735	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure. S – Shipment	ID 1/2

HL~1~~S }

Segment: **MEA** Measurements
Position: 080
Loop: HL
Level: Shipping
X12 Usage: Optional
Sanmina Usage: Optional
Max Use: 40
Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weight.
Notes: Recommended for use at the "Shipment" HL level.
Syntax Notes:
 1 MEA04 defines the unit of measure for MEA03.

Semantic Notes:
Comments:

Data Element Summary

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
	MEA01	737	Measurement Reference ID Code Code identifying the broad category to which a measurement applies PD Physical Dimensions	ID 2/2
	MEA02	738	Measurement Qualifier Code identifying a specific product or process characteristic to which a measurement applies G Gross Weight N Actual Net Weight	AN 1/3
	MEA03	739	Measurement Value The value of the measurement	R 1/20
	MEA04	C001	Composite Unit of Measure To identify a composite unit of measure (See Figures Appendix for examples of use)	
		355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken KG Kilogram LB Pound	ID 2/2

MEA~PD~G~50~LB }

Segment: **TD5** Carrier Details (Routing Sequence/Transit Time)
Position: 120
Loop: HL
Level: Shipping
X12 Usage: Optional
Sanmina Usage: Mandatory
Max Use: 12
Purpose: To specify the carrier and sequence of routing and provide transit time information. Used at shipment level.
Syntax Notes:

- 1 At least one of TD502 TD504 or TD505 is required.
- 2 If TD502 is present, then TD503 is required.

Semantic Notes:
Comments:

- 1 When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
	TD501	133	Routing Sequence Code Code describing the relationship of a carrier to a specific shipment movement O Origin Carrier (Air, Motor, or Ocean)	ID 1/2
	TD502	66	Identification Code qualifier Code designating the system/method of code structure used for Identification Code (67) 2 Standard Carrier Alpha Code	ID 1/2
	TD503	67	Identification Code Code identifying a party or other code Sanmina Corp. requests the SCAC code in this field.	AN 2/80
	TD504	91	Transportation Method / Type Code Code specifying the method or type of transportation for the shipment. (Most 3 rd party logistic centers will use supplier truck code) A Air AE Air Express D Parcel Post E Expedited Truck H Customer Pickup M Motor (Common Carrier) SR Supplier Truck U Private Parcel Service	ID 1/2
Must Use	TD505	387	Routing Free-form description of the routing or requested routing for shipment, or the originating carrier's identity Carrier name	AN 1/35

TD5~~~~~USF HOLLAND }

Segment: **REF** Reference Numbers
Position: 150
Loop: HL
Level: Shipping
X12 Usage: Optional
Sanmina Usage: Mandatory
Max Use: 11
Purpose: To specify identifying numbers. Used at shipment level.
Syntax Notes:
 1 If either C04003 or C04004 is present, then the other is required.
 2 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:
Comments:

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Information PK Packing Slip (Must send) WY Waybill Number (Must send) AW Air Waybill Number (Optional) BM Bill of Lading Number (Optional)	ID 2/2
Must Use	REF02	127	Reference Number Reference Number	AN 1/30

REF~PK~661324532 }
 REF~AW~45324532 }
 REF~BM~A324563 }
 REF~WY~561324532 }

Segment: **N1** Name
Position: 220
Loop: N1
Level: Shipping
X12 Usage: Optional
Sanmina Usage: Mandatory
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
 2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
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.

The following URL is where you will find a complete list of ship to codes that may be used by Sanmina:
<http://www.sanmina.com/partners-access/partner-programs/index.php>

Scroll to the bottom of the page and look for PDF document "Ship to Address Codes".

Data Element Summary

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
Must Use	N101	98	Entity Identifier Code Code identifying an organizational entity or a physical location. SE Seller Party ST Ship To	ID 2/3
Must Use	N102	93	Name Free-form name	AN 1/60
Must Use	N103	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) 92 Assigned by Buyer or Buyer's Agent.	ID 1/2
Must Use	N104	67	Identification Code Code identifying a party or other code. Sanmina's supplier code when N101 is SE. Sanmina's plant code when N101 is ST.	AN 2/80

```
N1~SE~XYZ Corporation~92~XYZ001}
N1~ST~SANMINA CORPORATION~92~12255}
```

Segment: **HL** Hierarchical Level
Position: 010
Loop: HL
Level: Item
X12 Usage: Mandatory
Sanmina Usage: Mandatory
Max Use: 199999
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments.

Syntax Notes:

Semantic Notes:

Comments:

- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
- 2 The HL segment defines a top down/left-right ordered structure.
- 3 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set.
- 2 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	HL01	628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure.	AN 1/12
	HL02	734	Hierarchical Parent ID Number Code defining the characteristic of a hierarchical structure	AN 1/12
Must Use	HL03	735	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure. I – Item	ID 1/2

HL~2~~I }

- Segment:** **LIN** **Item Identification**
- Position:** 010
- Loop:** HL
- Level:** Item
- X12 Usage:** Optional
- Sanmina Usage:** Mandatory
- Max Use:** 1
- Purpose:** To specify basic item identification data. Used at Item level.
- Syntax Notes:**
- 1 If either LIN04 or LIN05 is present, then the other is required.
 - 2 If either LIN06 or LIN07 is present, then the other is required.
 - 3 If either LIN08 or LIN09 is present, then the other is required.
- Semantic Notes:**
- 1 LIN01 is the line item identification
- Comments:**
- 2 LIN02 through LIN09 provide for different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
	LIN01	350	Assigned Identification Shipment line number	AN 1/11
Must Use	LIN02	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) BP Buyer's Part Number	ID 2/2
Must Use	LIN03	234	Product/Service ID Identifying number for a product or service Sanmina's Part Number	AN 1/48
	LIN04	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) EC Engineering Change Level	ID 2/2
	LIN05	234	Product/Service ID Identifying number for a product or service Sanmina's Part Revision	AN 1/48
Must Use	LIN06	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) MG Manufacturer's Part Number	ID 2/2
Must Use	LIN07	234	Product/Service ID Identifying number for a product or service Manufacturer's Part Number	AN 1/48
Must Use	LIN08	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) MF Manufacturer	ID 2/2
Must Use	LIN09	234	Product/Service ID Identifying number for a product or service Manufacturer's Name	AN 1/48

LIN~~BP~LFSYS278151~EC~1~MG~LT1121CS8~MF~XYZ Corporation}

Segment: **SN1** Item Detail Shipment
Position: 030
Loop: HL
Level: Item
X12 Usage: Optional
Sanmina Usage: Mandatory
Max Use: 1
Purpose: To specify line-item detail relative to shipment.
Syntax Notes:
Semantic Notes: 1 SN101 is the ship notice line-item identification.
Comments: 1 SN103 defines the unit of measurement for both SN102 and SN104.

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SN101	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set. Shipment Line Number	AN 1/20
Must Use	SN102	382	Number of Units Shipped Numeric value of units shipped in manufacturers shipping units for a line item or transaction set.	R 1/10
Must Use	SN103	355	Unit or Basis for Measurement Code Code specifying the units in which a value being expressed, or manner in which a measurement has been taken. EA – each	ID 2/2

SN1~1~1500~EA }

Segment: **PRF** Reference Numbers
Position: 050
Loop: HL
Level: Item
X12 Usage: Optional
Sanmina Usage: Mandatory
Max Use: 1
Purpose: To provide reference to a specific purchase order. Used at Item level.
Syntax Notes:
Semantic Notes: 1 PRF04 is the date assigned by the purchaser to purchase order.
Comments:

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PRF01	324	Purchase Order Number Identifying number for purchase order assigned by the order/purchaser. Sanmina's Purchase Order Number One Purchase Order per shipment	AN 1/22
	PRF02	328	Release number	AN 1/30
	PRF04	373	Date Expressed as CCYYMMDD PO Date	DT 8/8
	PRF05	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set. This number is the Delivery Identification Number – a concatenation of Sanmina’s release number, line number and shipment number.	AN 1/20

PRF~B3412456~02~~20140804~002001001}

Segment: **CTT Transaction Totals**
Position: 010
Loop:
Level: Summary
X12 Usage: Optional
Sanmina Usage: Mandatory
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes:
Semantic Notes:
Comments: 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	CTT01	354	Number of Line Items Total number of line items in the transaction set	N0 1/6

CTT~2 }

Segment: **SE** Transaction Set Trailer
Position: 020
Loop:
Level: Summary
X12 Usage: Mandatory
Sanmina Usage: Mandatory
Max Use: 1
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)
Syntax Notes:
Semantic Notes:
Comments: 1 SE is the last segment of each transaction set.

Data Element Summary

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	N0 1/10
Must Use	SE02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	AN 4/9

SE~17~0008}

Example: 856 Advance Ship Notice

ISA~00~ ~00~ ~01~42307654333
 ~01~SANMINACORP ~120603~1630~ ~00401~000000008~0~P~>}
 GS~SH~42307654333~SANMINACORP~20140804~1630~08~X~004010}
 ST~856~0008}
 BSN~00~1206670124~20140804~102846}
 DTM~011~20140804~102846~GM}
 HL~1~~S}
 MEA~PD~G~50~LB}
 TD5~O~2~HMES~M~USF HOLLAND}
 REF~PK~661324532}
 REF~WY~C3244524555}
 N1~SE~XYZ Corporation~92~XYZ001}
 N1~ST~SANMINA CORPORATION~92~12255}
 HL~2~~I}
 LIN~~BP~LFSYS2781151~EC~2~MG~LT1121CS8~MF~XYZ Corporation}
 SN1~1~1500~EA}
 PRF~B3412456~01~~20140804~002001001}
 CTT~2}
 SE~16~0008}
 GE~1~08}
 IEA~1~000000008}

Including Optional "REF" and "DTM" Values

ISA~00~ ~00~ ~01~42307654333
 ~01~SANMINACORP ~120603~1630~ ~00401~000000008~0~P~>}
 GS~SH~42307654333~SANMINACORP~20140804~1630~08~X~004010}
 ST~856~0008}
 BSN~00~1206670124~20140804~102846}
 DTM~011~20140804~102846~GM}
 DTM~017~20140809~102846~GM}
 HL~1~~S}
 MEA~PD~G~50~LB}
 TD5~O~2~HMES~M~USF HOLLAND}
 REF~PK~661324532}
 REF~AW~45324532}
 REF~BM~A324563}
 REF~WY~561324532}
 N1~SE~XYZ Corporation~92~XYZ001}
 N1~ST~SANMINA CORPORATION~92~12255}
 HL~2~~I}
 LIN~~BP~LFSYS2781151~EC~2~MG~LT1121CS8~MF~XYZ Corporation}
 SN1~1~1500~EA}
 PRF~B3412456~01~~20140804~002001001}
 CTT~2}
 SE~17~0008}
 GE~1~08}
 IEA~1~000000008}