



SANMINA®

# **SANMINA CORPORATION**

## **Traditional Ship Notice/Manifest INBOUND**

**856**

**VERSION**

**004010**

**Prepared By: Sanmina Information Technology & Services**

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**Version : 11**

# 856 Ship Notice/Manifest

Functional Group ID=**SH**

## Introduction:

This standard contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, and carrier information.

## 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 Ship Notice	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	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set 856 Ship Notice/Manifest	ID 3/3
Must Use	ST02	329	<b>Transaction Set Control Number</b> 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.

**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	<b>Transaction Set Purpose Code</b> Code identifying purpose of transaction set. 00 Original	ID 2/2
Must Use	BSN02	396	<b>Shipment Identification</b> A unique control number assigned by the original shipper to identify a specific shipment	AN 2/30
Must Use	BSN03	373	<b>Date</b> Date expressed as CCYYMMDD	DT 8/8
Must Use	BSN04	337	<b>Time</b> 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.

**Data Element Summary**

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

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

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.

**Data Element Summary**

<u>Sanmina Required</u>	<u>Ref. Desc.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
	MEA01	737	<b>Measurement Reference ID Code</b> Code identifying the broad category to which a measurement applies PD Physical Dimensions	ID 2/2
	MEA02	738	<b>Measurement Qualifier</b> 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	<b>Measurement Value</b> The value of the measurement	R 1/20
	MEA04	C001	<b>Composite Unit of Measure</b> To identify a composite unit of measure (See Figures Appendix for examples of use)	
		355	<b>Unit or Basis for Measurement Code</b> 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.

**Data Element Summary**

<b>Sanmina Required</b>	<b>Ref. Desc.</b>	<b>Data Element</b>	<b>Name</b>	<b>Attributes</b>
	<b>TD501</b>	<b>133</b>	<b>Routing Sequence Code</b> Code describing the relationship of a carrier to a specific shipment movement O Origin Carrier (Air, Motor, or Ocean)	<b>ID 1/2</b>
	<b>TD502</b>	<b>66</b>	<b>Identification Code qualifier</b> Code designating the system/method of code structure used for Identification Code (67) 2 Standard Carrier Alpha Code	<b>ID 1/2</b>
	<b>TD503</b>	<b>67</b>	<b>Identification Code</b> Code identifying a party or other code Sanmina Corp. requests the SCAC code in this field.	<b>AN 2/80</b>
	<b>TD504</b>	<b>91</b>	<b>Transportation Method / Type Code</b> Code specifying the method or type of transportation for the shipment. (Most 3 <sup>rd</sup> 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	<b>ID 1/2</b>
Must Use	<b>TD505</b>	<b>387</b>	<b>Routing</b> Free-form description of the routing or requested routing for shipment, or the originating carrier's identity Carrier name	<b>AN 1/35</b>

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.

**Data Element Summary**

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

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.

Please use the following URL to find a complete list of ship to codes that may be used by Sanmina:  
<https://www.sanmina.com/partners/partner-programs/>

Scroll and look for PDF document "Ship to Address Codes".

**Data Element Summary**

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

```
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.
- 4 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.

**Data Element Summary**

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

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	<b>Assigned Identification</b> Shipment line number	AN 1/11
Must Use	LIN02	235	<b>Product/Service ID Qualifier</b> 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	<b>Product/Service ID</b> Identifying number for a product or service Sanmina's Part Number	AN 1/48
	LIN04	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) EC Engineering Change Level	ID 2/2
	LIN05	234	<b>Product/Service ID</b> Identifying number for a product or service Sanmina's Part Revision	AN 1/48
Must Use	LIN06	235	<b>Product/Service ID Qualifier</b> 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	<b>Product/Service ID</b> Identifying number for a product or service Manufacturer's Part Number	AN 1/48
Must Use	LIN08	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) MF Manufacturer	ID 2/2
Must Use	LIN09	234	<b>Product/Service ID</b> 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	<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set. Shipment Line Number	AN 1/20
Must Use	SN102	382	<b>Number of Units Shipped</b> Numeric value of units shipped in manufacturers shipping units for a line item or transaction set.	R 1/10
Must Use	SN103	355	<b>Unit or Basis for Measurement Code</b> 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	<b>PRF01</b>	<b>324</b>	<b>Purchase Order Number</b> Identifying number for purchase order assigned by the order/purchaser. Sanmina's Purchase Order Number One Purchase Order per shipment	<b>AN 1/22</b>
	<b>PRF02</b>	<b>328</b>	<b>Release number</b>	<b>AN 1/30</b>
	<b>PRF04</b>	<b>373</b>	<b>Date</b> Expressed as CCYYMMDD PO Date	<b>DT 8/8</b>
	<b>PRF05</b>	<b>350</b>	<b>Assigned Identification</b> 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.	<b>AN 1/20</b>

PRF~B3412456~14~~20140804~014001001}

**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	<b>Number of Included Segments</b> Total number of segments included in a transaction set including ST and SE segments	N0 1/10
Must Use	SE02	329	<b>Transaction Set Control Number</b> 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~B3412456~14~~20140804~014001001}  
 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~B3412456~14~~20140804~014001001}  
 CTT~2}  
 SE~17~0008}  
 GE~1~08}  
 IEA~1~000000008}