SANMINA CORPORATION

PLANNING SCHEDULE WITH RELEASE OUTBOUND

830E

VERSION

004010

Prepared By: Sanmina Information Technology & Services
Date   : May 6, 2020
Version   : 3

830 Planning Schedule with Release Capability

Functional Group ID=PS

Introduction:

This standard contains the format and establishes the data contents of the Planning Schedule with Release Capability Transaction Set (830) 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 practice relative to the transfer of forecasting/material release information between organizations. The planning schedule transaction may be used in various ways or in a combination of ways, such as: (1) a simple forecast; (2) a forecast with the buyer's authorization for the seller to commit to resources, such as labor or material; (3) a forecast that is also used as an order release mechanism, containing such elements as resource authorizations, period-to-date cumulative quantities, and specific ship/delivery patterns for requirements that have been represented in "buckets," such as weekly, monthly, or quarterly. The order release forecast may also contain all data related to purchase orders, as required, because the order release capability eliminates the need for discrete generation of purchase orders.

Heading:

Pos No	Seg. ID	Name	X12 Req	Sanmina Required	Max Use	Loop Repeat	Notes and Comments
010	ST	Transaction Set Header	M	Must Use	1		
020	BFR	Beginning Segment for Planning Schedule	M	Must Use	1		
		LOOP ID - N1				200	
230	N1	Name	O	Must Use	1		

Detail:

Pos No	Seg. ID	Name	X12 Req	Sanmina Required	Max Use	Loop Repeat	Notes and Comments
		LOOP ID - LIN				>1	
010	LIN	Item Identification	M	Must Use	1		
020	UIT	Unit Detail	O	Must Use	1		
150	PER	Administrative Communications Contact	O		3		
220	QTY	Quantity	O		>1		N1
		LOOP ID - SDP				260	
450	SDP	Ship/Delivery Pattern	O	Must Use	1		
460	FST	Forecast Schedule	O	Must Use	260		

Summary:

Pos No	Seg. ID	Name	X12 Req	Sanmina Required	Max Use	Loop Repeat	Notes and Comments
010	CTT	Transaction Totals	O	Must Use	1		N2
020	SE	Transaction Set Trailer	M	Must Use	1		

Transaction Set Notes

1. QTY is used to specify supplemental quantities relevant to the forecast function. However, QTY is not related to the actual forecast quantity in the FST segments.
2. Number of line items (CTT01) is the accumulation of the number of LIN segments.

Available characters: **A-Z, a-z, 0-9, ., -, +, {, }, [,], 9, 0, :, ;, %, |, <, >, !, ", $, ~, ^, &, #, =, |, @, ä, å, ö, Ä, Å, Ö**

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) is 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:		

Data Element Summary

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
Must Use	**ST01**	**143**	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set 830 Planning Schedule with Release Capability	**ID 3/3**
Must Use	**ST02**	**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	**AN4/9**

ST~830~0008{

Segment:	**BFR** Beginning Segment for Planning Schedule	
Position:	020	
Loop:		
Level:	Heading	
X12 Usage:	Mandatory	
Sanmina Usage:	Mandatory	
Max Use:	1	
Purpose:	To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates	
Syntax Notes:	1	At least one of BFR02 or BFR03 is required.
Semantic Notes:	1	BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.
	2	BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins.
	3	BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends.
	4	BFR08 is the date forecast generated: The date the forecast data was generated.

Data Element Summary

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
Must Use	**BFR01**	**353**	**Transaction Set Purpose Code** Code identifying purpose of transaction set 00 Original	**ID 2/2**
	BFR02	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier *Identifying Number Assigned by Sanmina.*	**AN 1/30**
Must Use	**BFR04**	**675**	**Schedule Type Qualifier** Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast. DL Delivery Based.	**ID 2/2**
Must Use	**BFR05**	**676**	**Schedule Quantity Qualifier** Code identifying the type of quantities used when defining a schedule or forecast A Actual Discrete Quantities	**ID 1/1**
Must Use	**BFR06**	**373**	**Date** Date expressed as CCYYMMDD *Forecast Start Date*	**DT 8/8**
	BFR07	**373**	**Date** Date expressed as CCYYMMDD *Forecast End Date*	**DT 8/8**
Must Use	**BFR08**	**373**	**Date** Date expressed as CCYYMMDD *Forecast Generated Date*	**DT 8/8**

```
BFR~00~ABC123E2920140509678914381~~DL~A~201410509~20150509~20140509{
```

Segment:	**N1** Name
Position:	230
Loop:	N1
Level:	Heading
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

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
Must Use	**N101**	98	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual BT Bill To BY Buying Party (Purchaser) ST Ship To SE Selling Party	**ID 2/2**
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 Customer	**ID 1/2**
Must Use	**N104**	67	**Identification Code** Code identifying a party or other code DUNS Number when N101 is BY. *Sanmina's location code when N101 is BT or ST.* *Sanmina's supplier code for vendor when N101 is SE*	**AN 2/80**

```
N1~BT~ACCOUNTS PAYABLE~92~NASSC-AP{
N1~BY~SANMINA CORPORATION~1~79-877-8395{
N1~ST~Sanmina Corporation~92~443417{
N1~SE~ABC Corporation~92~ABC123{
```

Segment:		**LIN** Item Identification
Position:		010
Loop:		LIN
Level:		Detail
X12 Usage:		Mandatory
Sanmina Usage:		Mandatory
Max Use:		1
Purpose:		To specify basic item identification data
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.
Semantic Notes:	1	LIN01 is the line item identification
Comments:	1	See the Data Dictionary for a complete list of IDs.
	2	LIN02 through LIN31 provide for fifteen 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

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
	LIN01	350	**Assigned Identification** PO line Number (1)	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
Must Use	LIN04	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	LIN05	234	**Product/Service ID** Identifying number for a product or service *Manufacturer's Part Number*	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) PO Purchase Order Number	ID 2/2
Must Use	LIN07	234	**Product/Service ID** Identifying number for a product or service *Purchase Order 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) RN Release Number	ID 2/2
Must Use	LIN09	234	**Product/Service ID** Identifying number for a product or service *Purchase Order Release Number*	AN 1/48

```
LIN~~BP~LF12345-T~MG~74HC6789-T~PO~B29123456~RN~5{
```

Segment:	**UIT** Unit Detail
Position:	020
Loop:	LIN
Level:	Detail
X12 Usage:	Optional
Sanmina Usage:	Mandatory
Max Use:	1
Purpose:	To specify item unit data
Syntax Notes:	1 If UIT03 is present, then UIT02 is required.
Semantic Notes:	
Comments:	

Data Element Summary

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
Must Use	**UIT01**	**C001**	**Composite Unit of Measure** To identify a composite unit of measure	
		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	**ID 2/2**
	UIT02	**212**	**Unit Price** Price per unit of product, service, commodity, etc.	**R 1/17**

UIT~EA~112.34{

Segment:	**PER** **Administrative Communications Contact**
Position:	150
Loop:	LIN
Level:	Detail
X12 Usage:	Optional
Sanmina Usage:	Optional
Max Use:	3
Purpose:	To identify a person or office to whom administrative communications should be directed
Syntax Notes:	**1** If either PER03 or PER04 is present, then the other is required.
	2 If either PER05 or PER06 is present, then the other is required.
	3 If either PER07 or PER08 is present, then the other is required.
Semantic Notes:	
Comments:	

Data Element Summary

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
Must Use	PER01	366	**Contact Function Code** Code identifying the major duty or responsibility of the person or group named BD Buyer Name or Department	**ID 2/2**
	PER02	93	**Name** Free-form name *Sanmina's Contact Name*	**AN 1/60**
	PER03	365	**Communication Number Qualifier** Code identifying the type of communication number TE Telephone	**ID 2/2**
	PER04	364	**Communication Number** Complete communications number including country or area code when applicable *Sanmina Contact Telephone Number*	**AN 1/80**
	PER05	365	**Communication Number Qualifier** Code Identifying the type of communication number EM Email Address	**ID 2/2**
	PER06	364	**Communication Number** Complete communications number *Email Address of the Buyer*	**AN 1/80**

```
PER~BD~Smith, John~TE~603-555-1854~EM~john.smith@sanmina.com{
```

Segment:	**QTY** Quantity		
Position:	220		
Loop:	LIN		
Level:	Detail		
X12 Usage:	Optional		
Sanmina Usage:	Optional		
Max Use:	>1		
Purpose:	To specify quantity information		
Syntax Notes:	**1**	At least one of QTY02 or QTY04 is required.	
	2	Only one of QTY02 or QTY04 may be present.	
Comments:			

Data Element Summary

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
Must Use	**QTY01**	**673**	**Quantity Qualifier** Code specifying the type of quantity 01 Discrete Quantity	**ID 2/2**
Must Use	**QTY02**	**380**	**Quantity** Numeric value of quantity	**R 1/15**
Must Use	**QTY03**	**C001**	**Composite Unit of Measure** To identify a composite unit of measure (See Figures Appendix for examples of use)	
	C00101	**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	**ID 2/2**

```
QTY~01~3400~EA~PE{
```

Note: Sanmina will send only Discrete Quantities.

Segment:	**SDP** Ship/Delivery Pattern
Position:	450
Loop:	SDP
Level:	Detail
X12 Usage:	Optional
Sanmina Usage:	Mandatory
Max Use:	1
Purpose:	To identify specific ship/delivery requirements
Syntax Notes:	
Semantic Notes:	
Comments:	1 The intent of this segment is to define the routine ship or delivery patterns, as required, when order quantities are in "buckets", such as weekly, monthly. Ship/delivery patterns eliminate the need to transmit discrete quantities and dates for each required shipment or delivery.

Data Element Summary

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
Must Use	SDP01	678	**Ship/Delivery or Calendar Pattern Code** Code which specifies the routine shipments, deliveries, or calendar pattern Y None (Also Used to Cancel or Override a Previous Pattern)	**ID 1/2**
Must Use	SDP02	679	**Ship/Delivery Pattern Time Code** Code which specifies the time for routine shipments or deliveries Y None (Also Used to Cancel or Override a Previous Pattern)	**ID 1/1**

SDP~Y~Y{

Segment:		**FST** Forecast Schedule	
Position:		460	
Loop:		SDP	
Level:		Detail	
X12 Usage:		Optional	
Sanmina Usage:		Mandatory	
Max Use:		260	
Purpose:		To specify the forecasted dates and quantities	

Comments: 1   As qualified by FST02 and FST03, FST04 represents the first date of a weekly forecasted

Data Element Summary

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
Must Use	**FST01**	**380**	**Quantity** Numeric value of quantity	**R 1/15**
Must Use	**FST02**	**680**	**Forecast Qualifier** Code specifying the sender's confidence level of the forecast data or an action associated with a forecast C Firm D Planning	**ID 1/1**
Must Use	**FST03**	**681**	**Forecast Timing Qualifier** Code specifying interval grouping of the forecast. W Monday of Weekly Bucket.	**ID 1/1**
Must Use	**FST04**	**373**	**Date** Date expressed as CCYYMMDD	**DT 8/8**

```
FST~100~D~W~20110813{
```

	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:	**1** If either CTT03 or CTT04 is present, then the other is required.
		2 If either CTT05 or CTT06 is present, then the other is required.
	Semantic Notes:	
	Comments:	**1** This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

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

`CTT~1{`

	Segment:	**SE** **Transaction Set Trailer**

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

Sanmina Required	Ref. Desc.	Data Element	Name	Attributes
Must Use	SE01	96	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments	N0 1/6
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~20~0008{

Example: 830E Planning Schedule with Release

```
ISA~00~           ~00~           ~01~SANMINACORP     ~01~012345678
~140509~1217~U~00401~000000007~0~P~>{
GS~PS~SANMINACORP~12345678~20140509~1217~08~X~004010{
ST~830~0008{
BFR~00~ABC123E2920140509678914381~~DL~A~20140509~20150509~20140509{
N1~BT~ACCOUNTS PAYABLE~92~NASSC-AP{
N1~BY~SANMINA CORPORATION~1~79-877-8395{
N1~ST~Sanmina Corporation~92~443417{
N1~SE~ABC Corporation~92~ABC123{
LIN~~BP~LF12345-T~MG~74HC6789-T~PO~B29123456~RN~5{
UIT~EA~112.34{
PER~BD~Smith, John~TE~603-555-1854~EM~john.smith@sanmina.com{
QTY~01~3400~EA{
SDP~Y~Y{
FST~100~C~W~20140509{
FST~200~D~W~20140516{
FST~600~D~W~20140523{
FST~600~D~W~20140530{
FST~700~D~W~20140606{
FST~600~D~W~20140613{
FST~600~D~W~20140620{
LIN~~BP~9999-1111-T~MG~L44444CS4~PO~B29456789~RN~2{
UIT~EA~1.34{
PER~BD~Smith, John~TE~603-555-1854~EM~john.smith@sanmina.com{
QTY~01~3300~EA{
SDP~Y~Y{
FST~200~D~W~20140509{
FST~600~D~W~20140516{
FST~600~D~W~20140523{
FST~700~D~W~20140530{
FST~600~D~W~20140606{
FST~600~D~W~20140613{
CTT~1{
SE~33~0008{
GE~1~08{
IEA~1~000000007{
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