



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

| <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 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

| <u>Sanmina Required</u> | <u>Ref. Desc.</u> | <u>Data Element</u> | <u>Name</u> | <u>Attributes</u> |
|-------------------------|-------------------|---------------------|--|-------------------|
| 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 <i>Identifying Number Assigned by Sanmina.</i> | 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 <i>Forecast Start Date</i> | DT 8/8 |
| | BFR07 | 373 | Date Date expressed as CCYYMMDD <i>Forecast End Date</i> | DT 8/8 |
| Must Use | BFR08 | 373 | Date Date expressed as CCYYMMDD <i>Forecast Generated Date</i> | 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

| <u>Sanmina Required</u> | <u>Ref. Desc.</u> | <u>Data Element</u> | <u>Name</u> | <u>Attributes</u> |
|-------------------------|-------------------|---------------------|--|-------------------|
| 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. <i>Sanmina's location code when N101 is BT or ST.</i> <i>Sanmina's supplier code for vendor when N101 is SE</i> | 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

| <u>Sanmina Required</u> | <u>Ref. Desc.</u> | <u>Data Element</u> | <u>Name</u> | <u>Attributes</u> |
|-------------------------|-------------------|---------------------|---|-------------------|
| | 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 <i>Sanmina's Part Number</i> | 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 <i>Manufacturer's Part Number</i> | 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 <i>Purchase Order Number</i> | 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 <i>Purchase Order Release Number</i> | 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

| <u>Sanmina Required</u> | <u>Ref. Desc.</u> | <u>Data Element</u> | <u>Name</u> | <u>Attributes</u> |
|-------------------------|-------------------|---------------------|---|-------------------|
| 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

| <u>Sanmina Required</u> | <u>Ref. Desc.</u> | <u>Data Element</u> | <u>Name</u> | <u>Attributes</u> |
|-------------------------|-------------------|---------------------|---|-------------------|
| 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 <i>Sanmina's Contact Name</i> | 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 <i>Sanmina Contact Telephone Number</i> | 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 <i>Email Address of the Buyer</i> | 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

| <u>Sanmina Required</u> | <u>Ref. Desc.</u> | <u>Data Element</u> | <u>Name</u> | <u>Attributes</u> |
|-------------------------|-------------------|---------------------|---|-------------------|
| 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

| <u>Sanmina Required</u> | <u>Ref. Desc.</u> | <u>Data Element</u> | <u>Name</u> | <u>Attributes</u> |
|-------------------------|-------------------|---------------------|---|-------------------|
| 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

| <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~1{

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 1/6 |
| 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{