



**SANMINA-SCI
CORPORATION**

**PLANNING SCHEDULE WITH
RELEASE
OUTBOUND**

830E

VERSION

004010

Prepared By: Sanmina-SCI Information Technology & Services
Date : August 2, 2011
Version : 9

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-SCI 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-SCI 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		
140	REF	Reference Identification	O		12		
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-SCI 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-SCI 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>Sanmin a-SCI Require d</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-SCI 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.
 3 BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins.
 4 BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends.
 5 BFR08 is the date forecast generated: The date the forecast data was generated.

Data Element Summary

<u>Sanmina-SCI 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-SCI.</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~ABC123E2920110509678914381~~DL~A~20110509~20110509~20110509{

- Segment:** **N1** Name
Position: 230
Loop: N1
Level: Heading
X12 Usage: Optional
Sanmina-SCI 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.
 2 N105 and N106 further define the type of entity in N101.

Use this URL for a complete list of ship to codes used by Sanmina-SCI:

<http://sanmina-sci.com/partners/programs.html> Scroll to the bottom of the screen and look for PDF document "Ship to Address Codes".

Data Element Summary

<u>Sanmina-SCI 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. Sanmina-SCI's location code when N101 is BT or ST. Sanmina-SCI's supplier code for vendor when N101 is SE	AN 2/80

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

Segment: **LIN** **Item Identification**
Position: 010
Loop: LIN Mandatory
Level: Detail
X12 Usage: Mandatory
Sanmina-SCI 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-SCI 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-SCI'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

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

Segment: **UIT** Unit Detail
Position: 020
Loop: LIN
Level: Detail
X12 Usage: Optional
Sanmina-SCI 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-SCI 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 (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	ID 2/2
	UIT02	212	Unit Price Price per unit of product, service, commodity, etc.	R 1/17

UIT~EA~112.34 {

Segment: **REF** Reference Numbers
Position: 140
Loop: LIN
Level: Detail
X12 Usage: Optional
Sanmina-SCI Usage: Optional
Max Use: 12
Purpose: To specify identifying numbers.
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:

Data Element Summary

<u>Sanmina-SCI 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 MF Manufacturer	ID 2/2
Must Use	REF02	127	Reference Number Reference Number	AN 1/30

REF~MF~XYZ Corporation{

Note: If present, the REF segment contains the AVL information for the Sanmina-SCI Part Numbers.

Segment: **PER Administrative Communications Contact**
Position: 150
Loop: LIN
Level: Detail
X12 Usage: Optional
Sanmina-SCI 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-SCI 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-SCI'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-SCI Contact Telephone Number</i>	AN 1/80
	PER05	365	Communication Number Qualifier Code Identifying the type of communication number EM Email Address of the Buyer when PER01 is BD	ID 2/2
	PER06	364	Communication Number Complete communications number <i>Email Address of the Buyer when PER01 is BD</i>	AN 1/80

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

Segment: **QTY** Quantity
Position: 220
Loop: LIN
Level: Detail
X12 Usage: Optional
Sanmina-SCI 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.
Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.
Comments:

Data Element Summary

<u>Sanmina-SCI 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 02 Cumulative 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: We will send only Discrete Quantities.

Segment: **SDP** Ship/Delivery Pattern
Position: 450
Loop: SDP
Level: Detail
X12 Usage: Optional
Sanmina-SCI 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. It is assumed that a "bucketed" quantity is to be divided equally by the ship/delivery pattern. For example, a weekly quantity of 100 with a delivery pattern of Monday and Wednesday would result in 50 to be delivered on Monday and 50 to be delivered on Wednesday.

Data Element Summary

<u>Sanmina-SCI 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-SCI Usage: Mandatory
Max Use: 260
Purpose: To specify the forecasted dates and quantities
Syntax Notes:

- 1 If either FST06 or FST07 is present, then the other is required.
- 2 If either FST08 or FST09 is present, then the other is required.

Semantic Notes:

- 1 If FST03 equals "F" (indicating flexible interval), then FST04 and FST05 are required. FST04 would be used for the start date of the flexible interval and FST05 would be used for the end date of the flexible interval.

Comments:

- 1 As qualified by FST02 and FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket (weekly, monthly, quarterly, etc.) or the start date of a flexible interval.
- 2 FST06 qualifies the time in FST07. The purpose of the FST07 element is to express the specific time of day in a 24-hour clock to satisfy "just-in-time" requirements. As an alternative, the ship/delivery pattern segment (SDP) may be used to define an approximate time, such as a.m. or p.m.

Data Element Summary

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

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ISA~00~                ~00~                ~01~SANMINACORP      ~01~012345678
~110509~1217~U~00401~000000007~0~P~>{
GS~PS~SANMINACORP~12345678~20110509~1217~08~X~004010{
ST~830~0008{
BFR~00~ABC123E2920110509678914381~~DL~A~20110509~20120509~2011050
9{
N1~BT~ACCOUNTS PAYABLE~92~NASSC-AP{
N1~BY~SANMINA-SCI CORPORATION~1~79-877-8395{
N1~ST~Sanmina-SCI Corporation~92~443417{
N1~SE~ABC Corporation~92~ABC123{
LIN~~BP~ LF12345-T~MG~74HC6789-T ~PO~B29123456{
UIT~EA{
CUR~BY~USD{
PER~BD~Smith, John~TE~603-555-1854~EM~john.smith@sanmina-sci.com{
QTY~01~3400~EA{
SDP~Y~Y{
FST~100~C~W~20110509{
FST~200~D~W~20110516{
FST~600~D~W~20110523{
FST~600~D~W~20110530{
FST~700~D~W~20110606{
FST~600~D~W~20110613{
FST~600~D~W~20110620{
LIN~~BP~9999-1111-T~MG~L44444CS4~PO~B29456789{
UIT~EA{
CUR~BY~USD{
PER~BD~Smith, John~TE~603-555-1854~EM~john.smith@sanmina-sci.com{
QTY~01~3300~EA{
SDP~Y~Y{
FST~200~D~W~20110509{
FST~600~D~W~20110516{
FST~600~D~W~20110523{
FST~700~D~W~20110530{
FST~600~D~W~20110606{
FST~600~D~W~20110613{
CTT~1{
SE~33~0008{
GE~1~08{
IEA~1~000000007{

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