



EDI Transaction Set

830 Planning Schedule with Release Capability

X12 Version 4010

September 2013

ECIA's EDI Committee has reviewed this transaction set and made modifications that will benefit the electronics industry by simplifying the transaction focusing on industry specific needs.

NOTICE

ECIA Industry Guidelines and Publications contain material that has been prepared, progressively reviewed, and approved through various ECIA-sponsored industry task forces, comprised of ECIA member distributors, manufacturers, and manufacturers' representatives. After adoption, efforts are taken to ensure widespread dissemination of the guidelines. ECIA reviews and updates the guidelines as needed.

ECIA Industry Guidelines and Publications are designed to serve the public interest, including electronic component distributors, manufacturers and manufacturers' representatives through the promotion of uniform and consistent practices between manufacturers, distributors, and manufacturers' representatives resulting in improved efficiency, profitability, product quality, safety, and environmentally responsible practices. Existence of such guidelines shall not in any respect preclude any member or non-member of ECIA from adopting any other practice not in conformance to such guidelines, nor shall the existence of such guidelines preclude their voluntary use by those other than ECIA members, whether the guideline is to be used either domestically or internationally.

ECIA does not assume any liability or obligation whatever to parties adopting ECIA Industry Guidelines and Publications. Each company must independently assess whether adherence to some or all of the guidelines is in its own best interest.

Inquiries, comments, and suggestions relative to the content of this ECIA Industry Guideline should be addressed to ECIA headquarters.

Published by

ELECTRONIC COMPONENTS INDUSTRY ASSOCIATION
1111 Alderman Dr., Suite 400
Alpharetta, GA 30005
678-393-9990

Copyright 2013
Printed in U.S.A.
All rights reserved

830 Planning Schedule with Release Capability

Functional Group ID=**PS**

Introduction:

This Draft Standard for Trial Use 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:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BFR	Beginning Segment for Planning Schedule	M	1		
			LOOP ID - N1			200	
Must Use	230	N1	Name	M	1		
	280	PER	Administrative Communications Contact	O	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - LIN			>1	
Must Use	010	LIN	Item Identification	M	1		
Must Use	020	UIT	Unit Detail	M	1		
			LOOP ID - FST			>1	
Must Use	030	FST	Forecast Schedule	M	1		n1
			LOOP ID - SHP			25	
Must Use	470	SHP	Ship Delivery Pattern	M	1		
	480	REF	Reference Identification	O	1		

Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	010	CTT	Transaction Totals	M	1		n2
Must Use	020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. At least one occurrence of segment FST is required.
2. Number of line items (CTT01) is the accumulation of the number of LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (FST01) for each FST segment.

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level: Heading
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			
Ref. <u>Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
ST01	143	Transaction Set Identifier Code	M ID 3/3
		Code uniquely identifying a Transaction Set	
		830 Planning Schedule with Release Capability	
ST02	329	Transaction Set Control Number	M AN 4/9
		Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

Segment: **BFR** Beginning Segment for Planning Schedule
Position: 020
Loop:
Level: Heading
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 Does not apply.
2 BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.
3 Does not apply.
4 Does not apply.
5 Does not apply.
6 Does not apply.
Comments:

Data Element Summary				
Ref.	Data	Name	Attributes	
<u>Des.</u>	<u>Element</u>			
BFR01	353	Transaction Set Purpose Code	M	ID 2/2
		Code identifying purpose of transaction set		
		05 Replace		
BFR02	127	Reference Identification	X	AN 1/30
		Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
BFR03	328	Release Number	X	AN 1/30
		Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction		
>> BFR04	675	Schedule Type Qualifier	M	ID 2/2
		Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast		
		DL Delivery Based		
		SH Shipment Based		
BFR05	676	Schedule Quantity Qualifier	M	ID 1/1
		Code identifying the type of quantities used when defining a schedule or forecast		
		A Actual Discrete Quantities		
BFR06	373	Date	M	DT 8/8
		Date expressed as CCYYMMDD		
		Forecast horizon start date.		
		The date when the forecast horizon (envelope) begins.		
BFR07	373	Date	O	DT 8/8
		Date expressed as CCYYMMDD		
		The date when the forecast horizon (envelope) ends.		
BFR08	373	Date	M	DT 8/8
		Date expressed as CCYYMMDD		
		Date forecast generated.		
		The date the forecast data was generated.		

Segment:	N1 Name
Position:	230
Loop:	N1
Level:	Heading
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 Does not apply.
Notes:	The N1 at the header level applies to all items (LIN) contained at the detail level.

Data Element Summary				
Ref.	Data	Name	Attributes	
Des.	Element			
N101	98	Entity Identifier Code	M	ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual		
		ST Ship To		
N102	93	Name	X	AN 1/60
		Free-form name		
N103	66	Identification Code Qualifier	X	ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)		
		1 D-U-N-S Number, Dun & Bradstreet		
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix		
		91 Assigned by Seller or Seller's Agent		
		92 Assigned by Buyer or Buyer's Agent		
N104	67	Identification Code	X	AN 2/80
		Code identifying a party or other code		

Segment: **PER** **Administrative Communications Contact**
Position: 280
Loop: N1
Level: Heading
Usage: Optional
Max Use: 1
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.
Semantic Notes:
Comments:

Data Element Summary			
Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
PER01	366	Contact Function Code	M ID 2/2
		Code identifying the major duty or responsibility of the person or group named	
		BD Buyer Name or Department	
PER02	93	Name	O AN 1/60
		Free-form name	
PER03	365	Communication Number Qualifier	X ID 2/2
		Code identifying the type of communication number	
		TE Telephone	
PER04	364	Communication Number	X AN 1/80
		Complete communications number including country or area code when applicable	

Segment:	LIN Item Identification
Position:	010
Loop:	LIN
Level:	Detail
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. 3 If either LIN08 or LIN09 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.
Notes:	If only the vendor part number (VP) is available, then send it in the first occurrence and float up all other remaining information.

Data Element Summary			
Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
LIN01	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set	O AN 1/20
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	M ID 2/2
LIN03	234	Product/Service ID Identifying number for a product or service	M 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	X ID 2/2
LIN05	234	Product/Service ID Identifying number for a product or service	X AN 1/48
LIN06	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) VP Vendor's (Seller's) Part Number	X ID 2/2
LIN07	234	Product/Service ID Identifying number for a product or service	X AN 1/48
LIN08	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) PO Purchase Order Number	X ID 2/2
LIN09	234	Product/Service ID Identifying number for a product or service	X AN 1/48

Segment: **UIT** Unit Detail
Position: 020
Loop: LIN
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify item unit data
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
UIT01	C001	Composite Unit of Measure To identify a composite unit of measure (See Figures Appendix for examples of use)	M
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 EA Each PC Piece	M ID 2/2

Segment: **FST** Forecast Schedule
Position: 030
Loop: FST
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify the forecasted dates and quantities
Syntax Notes:
Semantic Notes: 1 Does not apply.
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 Does not apply.

Data Element Summary			
Ref. Des.	Data Element	Name	Attributes
FST01	380	Quantity Numeric value of quantity	M R 1/15
FST02	680	Forecast Qualifier Code specifying the sender's confidence level of the forecast data or an action associated with a forecast D Planning C Firm	M ID 1/1
FST03	681	Forecast Timing Qualifier Code specifying interval grouping of the forecast D Discrete W Weekly Bucket (Monday through Sunday) M Monthly F Flexible Interval	M ID 1/1
FST04	373	Date Date expressed as CCYYMMDD	M DT 8/8
FST05	681	Date Date expressed as CCYYMMDD Not required except for flexible interval – so not recommended	O DT 8/8
FST06	374	Date Time Qualifier If specific time is needed, can be used. Not recommended	X ID 3/3
FST07	373	Time Not recommended	X TM 4/8
FST08	128	Reference Identification Qualifier PO if embedded releases with new purchase order is used in this process. Should only be provided here if firm schedule with its own purchase order identifier.	X ID 2/3
FST09	127	Reference Identification Purchase Order identifier indicate for firm schedule with new purchase order.	X AN 1/30

Segment: **SHP** Shipped/Received Information

Position:	470
Loop:	SHP Optional
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify shipment and/or receipt information
Syntax Notes:	1 If SHP01 is present, then SHP02 is required. 2 If SHP03 is present, then at least one of SHP04 or SHP05 is required. 3 If SHP04 is present, then SHP03 is required. 4 If SHP05 is present, then SHP03 is required.
Semantic Notes:	1 SHP04 is the date shipped, delivered, received, or the cumulative quantity start date (as qualified by SHP03). 2 SHP06 is the cumulative quantity end date.
Comments:	1 The SHP segment is used to communicate shipment, delivery, or receipt information and may include discrete or cumulative quantities, dates, and times. 2 If SHP01 equals "02", "07", "08", "09", or "10" (indicating cumulative quantities), then SHP04 and SHP06 are required to identify the start and end dates of the quantity count.

Data Element Summary				
Ref.	Data	Name	Attributes	
Des.	Element			
SHP01	673	Quantity Qualifier	O	ID 2/2
		Code specifying the type of quantity		
		01 Discrete Quantity		
		02 Cumulative Quantity		
SHP02	380	Quantity	X	R 1/15
		Numeric value of quantity		
SHP03	374	Date/Time Qualifier	X	ID 3/3
		Code specifying type of date or time, or both date and time		
		050 Received		
SHP04	373	Date	X	DT 8/8
		Date expressed as CCYYMMDD		
N/U	SHP05	337 Time	X	TM 4/8
		Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)		
N/U	SHP06	373 Date	O	DT 8/8
		Date expressed as CCYYMMDD		
N/U	SHP07	337 Time	O	TM 4/8
		Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)		

Segment: **REF** Reference Identification
Position: 480
Loop: SHP
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify identifying information – in this case, last receipt information associated with the last shipment received..

Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary			
Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
REF01	128	Reference Identification Qualifier	M ID 2/2
		Code identifying the reference identification	
		SI Shipper's Identifying Number for Shipment (SID)	
REF02	127	Reference Identification	O AN 1/30
		Shipper ID Number	
REF03	350	Description	X AN 1/80
		A free-form description to clarify the data elements and their content. Not used.	
REF04	C040	Reference Identifier	O Composite
		Not used	

Segment: **CTT** Transaction Totals
Position: 010
Loop:
Level: Summary
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

Ref. <u>Des.</u>	Data <u>Element</u>	<u>Name</u>	<u>Attributes</u>
CTT01	354	Number of Line Items	M N0 1/6
		Total number of line items in the transaction set	
CTT02	347	Hash Total	O R 1/10
		Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.	

Segment: **SE** Transaction Set Trailer
Position: 020
Loop:
Level: Summary
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>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M N0 1/10
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	M AN 4/9

Example:

ST*830*1234
BFR*05**366*DL*A*20101019*20110831*20101205
N1*ST*company name*91*1234
LIN*001*BP*PN12345*EC*001*VP*12345-6*PO*123456789
UIT*PC
FST*258*C*D*20101019
FST*52*C*D*20101101
FST*324*C*D*20101108
FST*463*C*D*20101129
FST*59*D*W*20110117
FST*54*D*W*20110124
FST*183*D*W*20110221
FST*63*D*W*20110228
FST*30*D*W*20110321
FST*82*D*W*20110328
FST*176*D*M*20110430
FST*557*D*M*20110531
FST*122*D*M*20110630
FST*454*D*M*20110731
FST*266*D*M*20110831
FST*0*D*M*20110930
SHP*01*912*050*20100810
REF*SI*7891234
SHP*01*912*050*20100622
REF*SI*7891521
SHP*02*6234*051*20100101**20101018
CTT*1
SE*28*1234