Planning Schedule
with Release Capability

(Supplier Managed Inventory)

Transaction Set (830)

(Inbound to TI)

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Testing Procedures

- To begin testing a request needs to be made to the TI SC EDI Business Manager, Kim Harlow, at (214) 480-7982 (kharlow@ti.com) prior to sending any transmissions.

- A TI EDI Representative will contact you to begin testing.

- You will send a valid test file to Texas Instruments and notify us when it has been sent. A valid test file consists of:
  - 'T' sent in the ISA segment (ISA15)
  - Must contain all mandatory segments and fields contained in this documentation
  - Standard pack quantities

- Texas Instruments will review your transmissions and notify you of any problems.

- Move to production
  - TI SC EDI Business Manager, TI EDI Representative and the trading partner are mutually satisfied with the data being transmitted
  - TI EDI Representative will contact you to move you into production
  - 'P' sent in ISA segment (ISA15)

How To Use This Documentation

This document was created to aid in your implementation of the ANSI 3010 standard for planning schedules. This documentation contains those segments and elements required to successfully process your planning schedules for Texas Instruments Material Replenishment program.

A complete description of the planning schedule segments are outlined in the ANSI 3010 Standards Manual. If you require/need to send additional segments not listed in this documentation you must reach an agreement with Texas Instruments before sending those segments.

Data Element Attributes

M   = Mandatory (must be transmitted)
C   = Conditional (presence of this field is dependent on the value or presence of other data elements within the segment)
O   = Optional (the appearance of the element is either at the option of the sending party or based on agreement between the trading partners)

Data Element Types

AN = Alphanumeric
NN = Numeric
    1st N signifies numeric
    2nd N signifies the number of decimal places to the right of a fixed, implied decimal point (the decimal point is not transmitted for this data element type)
R   = Numeric Decimal (decimal point required to be transmitted when fractional values are present)
ID = Field contains a code value (codes are contained within predetermined lists maintained by the standards committee and are found in the appendix of ANSI manuals)
DT = Date formatted in YYMMDD, where
    YY = Last 2 digits of the year (00-99)
    MM = Numeric month (01-12)
    DD = Numeric day (01-31)
TM = Time formatted in HHMM, where
    HH = Military hour (00-23)
    MM = Minute (00-59)

Data Element Length

- The number to the left of the "/" specifies the minimum length of the field as required by the standard.
- The number to the right of the "/" specifies the maximum length of the field as required by the standard.
- When the minimum and maximum lengths are the same, this signifies the field has a fixed length.
- The minimum and maximum lengths do not include the decimal point (when data element is R).

Planning Schedule Transaction Set (830) - Inbound

This transaction set includes release capability. It is sometimes referred to as the Forecast transaction set.

SEG. ID	NAME	REQ.DES.	MAX USE	LOOP REPEAT
ISA	Interchange Control Header	M	1	
GS	Functional Group Header	M	1	
ST	Transaction Set Header	M	1	
BFR	Beginning Segment (Planning Schedule)	M	1	
REF	Reference numbers	O	12	
TAX	Sales Tax Reference	O	3	
LOOP ID - N1				
N1	Name	O	1	200
PER	Administrative Communications Contact	O	3	
LOOP ID - LIN				
LIN	Item Identification Detail	M	1	10,000
UIT	Unit Detail	M	1	
PO4	Item Physical Details	O	1	
QTY	Quantity	O	>1	
LOOP ID - N1				
N1	Name	O	1	200
LOOP ID - FST				
FST	Forecast Schedule	M	1	260
LOOP ID - SHP				
SHP	Shipped/Received Information	M	1	25
REF	Reference Numbers	M	5	
CTT	Transaction Totals	M	1	
SE	Transaction Set Trailer	M	1	
GE	Functional Group Trailer	M	1	
IEA	Interchange Control Trailer	M	1	

ISA - Interchange Control Header

Status: Mandatory

Purpose: To start and identify an interchange of one or more functional groups and interchange related control segments.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
ISA01	I01	Authorization Information Qualifier	M	ID	2/2	00 - No Authorization Information Present 01 - UCS Communications ID
ISA02	I02	Authorization Information	M	AN	10/10	Supplied by TI if using direct dial service
ISA03	I03	Security Information Qualifier	M	ID	2/2	00 - No Security Information Present 01 - Password
ISA04	I04	Security Information	M	AN	10/10	Supplied by TI if using direct dial service
ISA05	I05	Interchange ID Qualifier	M	ID	2/2	TI accepts all; TI uses 01 - DUNS (Dun & Bradstreet)
ISA06	I06	Interchange Sender ID	M	ID	15/15	Defined by Sender
ISA07	I05	Interchange ID Qualifier	M	ID	2/2	TI accepts all; TI uses 01 - DUNS (Dun & Bradstreet)
ISA08	I07	Interchange Receiver ID	M	ID	15/15	Defined by Receiver
ISA09	I08	Interchange Date	M	DT	6/6	Current Date: YYMMDD
ISA10	I09	Interchange Time	M	TM	4/4	Current Time: HHMM
ISA11	I10	Interchange Standards ID	M	ID	1/1	U - American National Standards Committee X12
ISA12	I11	Interchange Version ID	M	ID	5/5	This version number covers X12 control segments only. Positions 1-3 = major version number; positions 4-5 = release level of the version.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
ISA13	I12	Interchange Control Number	M	N0	9/9	This number is assigned by sender; together with sender ID, it uniquely identifies interchange data to receiver. It is suggested that sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.
ISA14	I13	Acknowledgment Requested	M	ID	1/1	0 - No Acknowledgment Requested 1 - Interchange Acknowledgment Requested
ISA15	I14	Test Indicator	M	ID	1/1	T - Test Data P - Production Data
ISA16	I15	Sub Element Separator	M	AN	1/1	Defined by Sender

GS - Functional Group Header

Status: Mandatory

Purpose: To start and identify a functional group of related transaction sets and provide control and application identification information.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
GS01	479	Functional ID Code	M	ID	2/2	Code identifying a group of application related transaction sets
GS02	142	Application Sender's Code	M	AN	2/12	Defined by Sender
GS03	124	Application Receiver's Code	M	AN	2/12	Defined by Receiver
GS04	29	Group Date	M	DT	6/6	Date sender generated a functional group of transaction sets. Format: YYMMDD
GS05	30	Group Time	M	TM	4/4	Time expressed in 24-hour clock time when the sender generated a functional group of transaction sets (local time at sender's location). Format: HHMM
GS06	28	Group Control Number	M	N0	1/9	Sequentially assigned by sender
GS07	455	Responsible Agency Code	M	ID	1/2	X - Accredited Standards Committee X12
GS08	480	Version/Release/ Industry ID Code	M	ID	1/12	Code indicating the version, release, and industry ID of the EDI standard being used. Positions 1 - 3 = major version number; positions 4 - 6 = release number.

ST - Transaction Set Header

Status: Mandatory

Purpose: The first segment of each transaction set, containing the transaction set identifier and control numbers.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
ST01	143	Transaction Set ID Code	M	ID	3/3	830 - Planning Schedule
ST02	329	Transaction Set Control Number	M	AN	4/9	The control number is assigned by the sender. It should be sequentially assigned within each functional group to aid in error recovery and research. The control number in the SE segment (SE02) must be identical to the control number in the ST segment for each transaction.

BFR - Beginning Segment (Planning Schedule)

Status: Mandatory

Purpose: To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
BFR01	353	Transaction Set Purpose Code	M	ID	2/2	00 - Original 05 - Replace
BFR02	127	Reference Number	C	AN	1/30	Defined by Sender
BFR03	328	Release Number	C	AN	1/30	Defined by Sender
BFR04	675	Schedule Type Qualifier	M	ID	2/2	DL - Delivery Based
BFR05	676	Schedule Quantity Qualifier	M	ID	1/1	A - Actual Discrete Quantities
BFR06	373	Date	M	DT	6/6	Forecast start date (YYMMDD)
BFR07	373	Date	M	DT	6/6	Forecast end date (YYMMDD)
BFR08	373	Date	M	DT	6/6	Date that forecast was generated (YYMMDD)
BFR09	373	Date	O	DT	6/6	Note USed
BFR10	367	Contract Number	O	AN	1/30	Contract Number
BFR11	324	Purchase Order Number	O	AN	1/2	Purchase Order Number
BF212	783	Planning Schedule Type Code	O	ID	2/2	Not Used

NOTE: BFR04 - the forecast type qualifier is defaulted from the TI Customer Profile database.

REF - Reference Numbers

Status: Optional

Purpose: To specify identifying numbers.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
REF01	128	Reference number qualifier	M	ID	2/2	Note 1
REF02	127	Reference number	C	AN	1/30	Reference number
REF03	352	Description	C	AN	1/80	Not used

NOTE:

1.   GC - Government Contract Number
            GP - Government Priority Number

TAX - Sales Tax Reference

Status: Optional

Purpose: To provide data required for proper notification/determination of applicable sales and related taxes applying to the transaction.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
TAX01	325	Tax ID Number	C	AN	1/20	Tax ID Number

NOTE: TAX02 through TAX12 are not used.

N1 - Name

Status: Optional

Purpose: To identify a party by type of organization, name and code.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
N101	98	Entity ID Code	M	ID	2/2	BY - Buying Party (Location) ST - Ship To
N102	93	Name	C	AN	1/35	Buyer's Name
N103	66	ID Code Qualifier	C	ID	1/2	1 - Dun & Bradstreet 91 - TI Customer's ID Number 92 - Sender's Internal Customer ID Number
N104	67	ID Code	C	ID	2/17	Number qualified by N103

PER - Administrative Communications Contact

Status: Optional

Purpose: To identify a person or office to whom administrative communications should be directed.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
PER01	366	Contact Function Code	M	ID	2/2	BD - Buyer Name
PER02	93	Name	O	AN	1/35	Name
PER03	365	Communication Number Qualifier	O	ID	2/2	TE - Telephone
PER04	364	Communication Number	C	AN	7/21	Telephone Number

LIN - Item Identification Detail

Status: Mandatory

Purpose: To specify basic item identification data.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
LIN01	350	Assigned Identification	O	AN	1/6	Line item identifying number
LIN02	235	Product/Service ID Qualifier	M	ID	2/2	BP - Buyer's Part Number
LIN03	234	Product/Service ID	M	AN	1/30	Customer Part Number
LIN04	235	Product/Service ID Qualifier	O	ID	2/2	EC - Engineering Change Level
LIN05	234	Product/Service ID	C	AN	1/30	Revision level to a drawing
LIN06	235	Product/Service ID Qualifier	O	ID	2/2	VP - Vendor's Part Number
LIN07	234	Product/Service ID	C	AN	1/30	TI Part Number

NOTE: LIN08 through LIN31 are not used.

UIT - Unit Detail

Status: Mandatory

Purpose: To specify item unit data.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
UIT01	355	Unit of Measure Code	M	ID	2/2	Unit of Measure EA - Each
UIT02	212	Unit Price	C	R	1/14	Price Per Unit
UIT03	639	Basis Unit Price Code	O	ID	2/2	Not Used

PO4 - Item Physical Details

Status: Optional

Purpose: To specify the physical qualities, packaging, weights and dimensions relating to the item.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
PO401	356	Pack	O	N0	1/6	Not Used
PO402	357	Size	O	R	1/8	Not Used
PO403	355	Unit of Measure Code	C	ID	2/2	Not Used
PO404	103	Packaging Code	O	ID	5/5	REL90 - Reel/Standard

NOTE: PO405 through PO413 are not used.

QTY - Quantity

Status: Optional

Purpose: To specify quantity information.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
QTY01	673	Quantity Qualifier	M	ID	2/2	02 - Cumulative Quantity 17 - Quantity on Hand 64 - Past Due Quantity 72 - Minimum Stock Level 73 - Maximum Stock Level
QTY02	380	Quantity	M	R	1/10	Quantity
QTY03	355	Unit of Measure Code	O	ID	2/2	Not Used

N1 - Name

Status: Optional

Purpose: To identify a party by type of organization, name and code.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
N101	98	Entity ID Code	M	ID	2/2	ST - Ship To
N102	93	Name	C	AN	1/35	Name
N103	66	ID Code Qualifier	C	ID	1/2	1 - Dun & Bradstreet 91 - TI Customer's ID Number 92 - Sender's Internal Customer ID Number
N104	67	ID Code	C	ID	2/17	Number qualified by N103

FST - Forecast Schedule

Status: Mandatory

Purpose: To specify the forecasted dates and quantities.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
FST01	380	Quantity	M	R	1/10	Forecast Quantity
FST02	680	Forecast Qualifier	M	ID	1/1	C - Firm D - Planning
FST03	681	Forecast Timing Qualifier	M	ID	1/1	D - Discrete W - Weekly
FST04	373	Date	M	DT	6/6	Forecast Date (YYMMDD)
FST05	373	Date	O	DT	6/6	Not Used
FST06	374	Date/Time Qualifier	C	ID	3/3	Not Used
FST07	337	Time	C	TM	4/6	Not Used
FST08	128	Reference Number Qualifier	C	ID	2/2	PO - Purchase Order Number
FST09	127	Reference Number	C	AN	1/30	Purchase Order Number

SHP - Shipped/Received Information

Status: Mandatory

Purpose: To specify shipment and/or receipt information.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
SHP01	673	Quantity Qualifier	O	ID	2/2	01 - Discrete Quantity 02 - Cumulative Quantity
SHP02	380	Quantity	C	R	1/10	Quantity
SHP03	374	Date/Time Qualifier	C	ID	3/3	050 - Received
SHP04	373	Date	O	DT	6/6	Received Date (YYMMDD)

NOTE: SHP05 through SHP07 are not used.

REF - Reference Numbers

Status: Mandatory

Purpose: To specify identifying numbers.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
REF01	128	Reference Number Qualifier	M	ID	2/2	PK - Packing List Number
REF02	127	Reference Number	C	AN	1/30	Packing List Number
REF03	352	Description	C	AN	1/80	Not Used

CTT - Transaction Totals

Status: Mandatory

Purpose: To transmit a hash total for a specific element in the transaction set.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
CTT01	354	Number of Line Items	M	N0	1/6	Number of line item segments in this transaction set

NOTE: CTT02 through CTT07 are not used.

SE - Transaction Set Trailer

Status: Mandatory

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.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
SE01	96	Number of Included Segments	M	N0	1/6	The total number of all segments in the transaction set, including the ST and SE segments.
SE02	329	Transaction Set Control Number	M	AN	4/9	The control number is assigned by the sender. It should be sequentially assigned within each functional group to aid in error recovery and research. The control number in the SE segment must be identical to the control number in the ST segment (ST02) for each transaction.

GE - Functional Group Trailer

Status: Mandatory

Purpose: To indicate the end of a functional group and to provide control information.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
GE01	97	Number of Included Transaction Sets	M	N0	1/6	The total number of transaction sets included.
GE02	28	Group Control Number	M	N0	1/9	The data interchange control number must match the same data element (GS06) in the functional group header segment.

IEA - Interchange Control Trailer

Status: Mandatory

Purpose: To define the end of an interchange of one or more functional groups and interchange related control segments.

Field #	Element	Field Name	Req.	Type	Size	TI Usage
IEA01	I16	Number of Included Groups	M	N0	1/5	A count of the number of functional groups included in a transmission.
IEA02	I12	Interchange Control Number	M	N0	9/9	This number is assigned by sender; together with sender ID, it uniquely identifies interchange data to receiver. It is suggested that sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.