

SEMI E170.1-1217

SPECIFICATION FOR SECS-II PROTOCOL FOR SECURED FOUNDATION OF RECIPE MANAGEMENT SYSTEM

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1 Purpose

1.1 The purpose of this Standard is to provide a mapping of the services and data of SEMI E170, Specification for Secured Foundation Of Recipe Management System to SECS-II message protocol.

2 Scope

2.1 The scope of this Standard is to map the services and data of SEMI E170 to SECS-II streams, functions, and items.

NOTICE: SEMI Standards and Safety Guidelines do not purport to address all safety issues associated with their use. It is the responsibility of the users of the Documents to establish appropriate safety and health practices, and determine the applicability of regulatory or other limitations prior to use.

3 Referenced Standards and Documents

3.1 SEMI Standards and Safety Guidelines

SEMI E5 — Specification for SEMI Equipment Communications Standard 2 Message Content (SECS-II)

SEMI E30 — Specification for the Generic Model for Communications and Control of Manufacturing Equipment (GEM)

SEMI E39 — Object Services Standard: Concepts, Behavior, and Services

SEMI E39.1 — SECS-II Protocol for Object Services Standard (OSS)

SEMI E40 — Standard for Processing Management

SEMI E170 — Specification for Secured Foundation Of Recipe Management System (SFORMS)

NOTICE: Unless otherwise indicated, all documents cited shall be the latest published versions.

4 Terminology

4.1 None.

5 Mapping of SRSOBJ Services

Table 1 SRSOBJ Service Messages Mapping

<i>SRSOBJ Service Message Name</i>	<i>Stream, Function</i>	<i>SECS-II Name</i>
GetSRSAAttributes	S14F1,F2	GetAttr Request/GetAttr Data
SetSRSSwitch	S20F1,F2	SetSRSSwitch Request/Acknowledge
SetPEMFlag	S20F3,F4	SetPEMFlag Request/Acknowledge
ClearClass	S20F5,F6	ClearClass Request/Acknowledge
DeleteRecipe	S20F7,F8	DeleteRecipe Request/Acknowledge
WriteRecipe	S20F9,F10	WriteRecipe Request/Acknowledge
GetRecipeXIIDLList	S20F11,F12	GetRecipeXIIDLList Request/Acknowledge
ReadRecipe	S20F13,F14	ReadRecipe Request/Acknowledge
PreSpecifyRecipe	S20F15,F16	PreSpecifyRecipe Request/Acknowledge

<i>SRSOBJ Service Message Name</i>	<i>Stream, Function</i>	<i>SECS-II Name</i>
PresetRecipeXID	S20F17,F18	PresetRecipeXID Request/Acknowledge
Pre-ExeCheck	S20F19,F20	Pre-ExeCheck Request/Acknowledge
QueryRecipeXIDList	S20F21,F22	QueryRecipeXID Request/Acknowledge
QueryRecipe Event	S20F23,F24	QueryRecipeEvent Send/Acknowledge
Pre-ExeCheck Event	S20F25,F26	Pre-ExeCheckEvent Send/Acknowledge
QueryRecipeXIDList Event	S20F27,F28	QueryRecipeXIDListEvent Send/Acknowledge
PostRecipe Event	S20F29,F30	PostRecipeEvent Send/Acknowledge

6 Mapping of SRSOBJ Parameter

Table 2 SRSOBJ Service Parameter to SECS-II Data Items Mapping

<i>SRSOBJ Service Parameter</i>	<i>Range</i>	<i>SECS-II Data Item</i>
ObjID	[20] 1-80 characters	OBJID
ObjType	[20]	'SRObject'
SRSSwitch	[51] Enumerated: 0=Disabled, 1=Enabled	SRSSWITCH
PEMFlag	[20] 0-16 characters: 'Conventional', 'Production', 'Production n'	PEMFLAG
PEMFlagList	[0] Structure	L,n 1. <PEMFLAG ₁ > : n. <PEMFLAG _n >
RecipeID	[20]	RecID, defined in SEMI E40 (i.e., RCPSPEC or PPID)
VersionID	[20] 0-256 characters	VERID
SecurityID	[20] 0-16 characters	SECID
TypeID	[20] 0-16 characters	TYPEID
EquipmentID	[20] 0-256 characters	EQID
RecipeXID	[0] Structure	L,5 1. <RecID> 2. <VERID> 3. <SECID> 4.<TYPEID> 5.<EQID>
RecipeBody	User defined	RCPBODYA

<i>SRSOBJ Service Parameter</i>	<i>Range</i>	<i>SECS-II Data Item</i>
RecipeXIDList	[0] Structure	L, n 1. L,5 1. <RecID _i > 2. <VERID _i > 3. <SECID _i > 4.<TYPEID _i > 5.<EQID _i > : n. L,5 1. <RecID _n > 2. <VERID _n > 3. <SECID _n > 4.<TYPEID _n > 5.<EQID _n >
RecipeList	[0] Structure	L,n 1. L,6 1. <RecID _i > 2. <VERID _i > 3. <SECID _i > 4.<TYPEID _i > 5.<EQID _i > 6.<RCPBODYA _i > : n. L,6 1. <RecID _n > 2. <VERID _n > 3. <SECID _n > 4.<TYPEID _n > 5.<EQID _n > 6.<RCPBODYA _n >
CheckInformation	User defined	CHKINFO
Pre-ExeCheckResult	[51] Enumerated: 0=OK, 1=NG	PECKACK
SetSRSSwitchResp	[51] Enumerated: 0=Done, 1=Error	SSSACK
SetPEMFlagResp	[51] Enumerated: 0=Done, 1=Error	SPFACK
ClearClassResp	[51] Enumerated: 0=Done, 1=Error	CCACK
DeleteRecipeResp	[51] Enumerated: 0=Done, 1=Error	DRRACK
RecipeTransferResult	[51] Enumerated: 0=Done, 1=Error, 2=Full	RXACK
EachRecipeTransfer	[51] Enumerated: 0=Done, 1=NG	ERXACK