

SEMI E42.1-0704

STANDARD FOR SECS-II PROTOCOL FOR RECIPE MANAGEMENT STANDARD (RMS)

This standard was technically approved by the Global Information & Control Committee and is the direct responsibility of the Japanese Information & Control Committee. Current edition approved by the Japanese Regional Standards Committee on April 30, 2004. Initially available at www.semi.org June 2004; to be published July 2004. Originally published in 1996; previously published September 1997.

1 Purpose

1.1 This document maps the services and data of the parent document to SECS-II streams and functions and data definitions.

2 Scope

2.1 This document applies to all implementations of Recipe Management that use the SECS-II message protocol (SEMI E5).

NOTICE: This standard does not purport to address safety issues, if any, associated with its use. It is the responsibility of the users of this standard to establish appropriate safety and health practices and determine the applicability of regulatory or other limitations prior to use.

3 Referenced Standards

3.1 SEMI Standards

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

SEMI E42 — Recipe Management Standard: Concepts, Behavior, and Message Services

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

4 Terminology

None.

5 Service Mapping

5.1 Table 1 shows the specific SECS-II streams and functions that shall be used for SECS-II implementations of the services defined in RMS.

5.2 Request and notification messages are mapped to primary (odd-numbered) SECS-II functions and response messages are mapped to secondary (even-numbered) SECS-II functions.

5.3 In several cases, a common set of parameters allows more than one RMS services to be mapped to a single stream and function, with an additional SECS-II data item used to differentiate between the two services. RMNCreateNS and RMNDeleteNS both map to S15,F3/F4, RMNCreate and RMNUpdate both map to S15,F13/F14, and RMNCopy and RMNRename both map to S15,F19/F20.

5.4 In addition, the notification messages RMNComplete, RMEComplete, RMEChange, RMDComplete, and RMDNotify all map to S6,F25/F26.

Table 1 Services Mapping Table

Message Name	Stream, Function	SECS-II Name
RMNCreateNS	S15,F3/F4	Recipe Namespace Action Request/Acknowledge
RMNDeleteNS	S15,F3/F4	Recipe Namespace Action Request/Acknowledge
RMNRenameNS	S15,F5/F6	Recipe Namespace Rename Request/Acknowledge
RMNSpaceInquire	S15,F7/F8	Recipe Space Request/Data
RMNRcpStatInquire	S15,F9/F10	Recipe Status Request/Data
RMNVersionInquire	S15,F11/F12	Recipe Version Request/Data
RMNCreate	S15,F13/F14	Recipe Create Request/Acknowledge
RMNUpdate	S15,F13/F14	Recipe Create Request/Acknowledge
RMNStore	S15,F15/F16	Recipe Store Request/Acknowledge
RMNRetrieve	S15,F17/F18	Recipe Retrieve Request/Data
RMNCopy	S15,F19/F20	Recipe Rename Request/Acknowledge
RMNRename	S15,F19/F20	Recipe Rename Request/Acknowledge

Message Name	Stream, Function	SECS-II Name
RMNAction	S15,F21/F22	Recipe Action Request/Acknowledge
RMNGetDescriptor	S15,F23/F24	Recipe Descriptor Request/Data
RMNVarPar	S15,F25/F26	Recipe Parameter Update Request/Acknowledge
RMNComplete	S6,F25	Notification Report Send
RMEDnldVer	S15,F27/F28	Recipe Download
RMEVerify	S15,F29/F30	Recipe Verify
RMEUpload	S15,F31/F32	Recipe Upload
RMSpaceInquire	S15,F7/F8	Recipe Space Request/Data
RMERename	S15,F19/F20	Recipe Rename Request/Acknowledge
RMEDelete	S15,F35/F36	Recipe Delete Request/Acknowledge
RMESelect	S15,F33/F34	Recipe Select Request/Acknowledge
RMEDeselect	S15,F35/F36	Recipe Deselect Request/Acknowledge
RMEGetDescriptor	S15,F23/F24	Recipe Descriptor Request/Data
RMNAction	S15,F21/F22	Recipe Action Request/Acknowledge
RMEChange	S6,F25	Notification Report Send
RMEComplete	S6,F25	Notification Report Send
RMDSAApproveAction	S15,F37/F38	DRNS Segment Approve Action Request/Acknowledge
RMDRAdd SegRecord	S15,F39/F40	DRNS Recorder Segment Request/Acknowledge
RMDRDelSegRecord	S15,F39/F40	DRNS Recorder Segment Request/Acknowledge
RMDRAddChgRecord	S15,F41/F42	DRNS Recorder Modify Request/Acknowledge
RMDRDelChgRecord	S15,F41/F42	DRNS Recorder Modify Request/Acknowledge
RMDRGetChgRecord	S15,F43/F44	DRNS Get Change Request/Data
RMDGetChgRequest	S15,F43/F44	DRNS Get Change Request/Data
RMDSegChange	S15,F45/F46	DRNS Manager Segment Change Approval Request/Grant
RMDRebuild	S15,F47/F48	DRNS Manager Rebuild Request/Acknowledge
RMDComplete	S6,F25/F26	Notification Report Send
RMDNotify	S6,F25/F26	Notification Report Send
Attach	S14F13,F14	Object Attach Request/Acknowledge (SEMI E39.1)
AttachSetAttr	S14F15,F16	Attached Object Action request/Acknowledge (SEMI E39.1)
AttachSupervisedObject	S14F17,F18	Supervised Object Action Request/Acknowledge (SEMI E39.1)
Create	S14F9,F10	Create Object Request/Acknowledge (SEMI E39.1)
Delete	S14F11,F12	Delete Object Request/Acknowledge (SEMI E39.1)
Detach	S14F15,F16	Attached Object Action Request/Acknowledge (SEMI E39.1)
DetachSupervisedObject	S14F17,F18	Supervised Object Action Request/Acknowledge (SEMI E39.1)
Reattach	S14F13,F14	Object Attach Request/Acknowledge (SEMI E39.1)

6 Service Parameter Mapping

6.1 Table 2 shows the mapping between message parameters defined by RMS and data items defined by SECS-II. For parameters specified in the definitions of an RMS service, either the parameters themselves, or individual elements of complex parameters, map to a specific data item.

Table 2 Service Parameters Item Mapping Table

Parameter Name	SECS-II Data Item
RMSectionsCode	RCPSECCODE
AgentSpec_DescLength	RCPDESCLTH
AgentSpec_DescName	RCPDESCNM = "ASDesc"
AgentSpec_DescTimestamp	RCPDESCTIME
AgentSpec_SectionName	RCPSECNM = "ASDS"

<i>Parameter Name</i>	<i>SECS-II Data Item</i>
AttrData	RCPDESCLTH
AttrName	ATTRID
BodyData	RCPBODY
BodyDescLength	RCPDESCLTH
BodyDescName	RCPDESCNM = "BodyDesc"
BodyDescTimestamp	RCPDESCTIME
BodySectionName	RCPSECNM = "Body"
ErrorCode	ERRCODE
ErrorText	ERRTEXT
GenAttrSectionName	RCPSECNM = "Generic"
GenDescLength	RCPDESCLTH
GenDescTimestamp	RCPDESCTIME
LinkID	LINKID
NSAck	RMACK
RcpClass	RCPCLASS
RcpName	RCPNAME
RcpVersion	RCPVERS
RMAction	RCPCMD
RMAgent	AGENT
RMChangeStatus	RMCHGSTAT
RMDestRecID	RCPNEWID
RMNewNS	RMNEWNS
RMNSSpec	RMNSSPEC
RMOpID	OPID
RMParmName	RCPPARMN
RMParmRule	RCPPARRULE
RMParmSetting	RCPPARVAL
MRcpID	RCPID
MRcpSpec	RCPSPEC
MRcpStat	RCPSTAT
RMSectionsCode	RCPSECCODE
RMSpace	RMSPACE
RcpDerivedID	RCPID
REAck	RMACK
REAttrDescLength	RCPDESCLTH
REAttrDescName	RCPDESCNM = "REAttrDesc"
REAttrDescTimestamp	RCPDESCTIME
REAttrSectionName	RCPSECNM = "Attribute"
REChangeStatus	CHGCODE
REDerivedID	RCPID
REDestRcpID	RCPNEWID
REOpID	OPID
REWOCODE	REOWCODE
REParamName	PARAMNAME
REParamSetting	PARAMVALUE
RERcpID	RCPID
RERcpSpec	RCPSPEC
RESpace	RMSPACE
RESpec	RESPEC