

SEMI E39.1-1101

SECS-II PROTOCOL FOR OBJECT SERVICES STANDARD (OSS)

This standard was technically approved by the Global Information and Control Committee and is the direct responsibility of the North American Information and Control Committee. Current edition approved by the North American Regional Standards Committee on August 27, 2001. Initially available at www.semi.org September 2001; to be published November 2001. Originally published in 1995; previously published December 1996.

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 Object Services that use the SECS-II message protocol (SEMI E5).

2.2 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 health practices and determine the applicability or regulatory limitations prior to use.

3 Applicable Documents

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

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

4 Mapping of Object Services

4.1 Table 1 shows the specific SECS-II streams and functions that shall be used for SECS-II implementations for the object services defined in OSS.

Table 1 Services Mapping Table

Message Name	Stream, Function	SECS-II Name
GetAttr.req	S14,F1	GetAttr Request
GetAttr.rsp	S14,F2	GetAttr Data
SetAttr.req	S14,F3	SetAttr Request
SetAttr.rsp	S14,F4	SetAttr Data
GetType.req	S14,F5	GetType Request
GetType.rsp	S14,F6	GetType Data
GetAttrName.req	S14,F7	GetAttrName Request
GetAttrName.rsp	S14,F8	GetAttrName Data
Create.req	S14,F9	Create Object Request
Create.rsp	S14,F10	Create Object Acknowledge
Delete.req	S14,F11	Delete Object Request
Delete.rsp	S14,F12	Delete Object Acknowledge
Attach.req	S14,F13	Object Attach Request
Attach.rsp	S14,F14	Object Attach Acknowledge
AttachSetAttr.req	S14,F15	Attached Object Action Request
AttachSetAttr.rsp	S14,F16	Attached Object Action Acknowledge
AttachSupervisedObject.req	S14,F17	Supervised Object Action Request
AttachSupervisedObject.rsp	S14,F18	Supervised Object Action Acknowledge
Detach.req	S14,F15	Attached Object Action Request
Detach.rsp	S14,F16	Attached Object Action Acknowledge
DetachSupervisedObject.req	S14,F17	Supervised Object Action Request
DetachSupervisedObject.rsp	S14,F18	Supervised Object Action Acknowledge
Reattach.req	S14,F13	Object Attach Request
Reattach.rsp	S14,F14	Object Attach Acknowledge

Message Name	Stream, Function	SECS-II Name
GetServiceNames.req	S14,F25	Get Service Name Request
GetServiceNames.rsp	S14,F26	Get Service Name Data
GetServiceParameters.req	S14,F27	Get Service Parameter Name Request
GetServiceParameters.rsp	S14,F28	Get Service Parameter Name Data
ObjectAction.req	S14,F19	Generic Service Request
ObjectAction.rsp	S14,F20	Generic Service Acknowledge
ObjectActionCompletion.nfy	S14,F21	Generic Service Completion Information
ObjectActionCompletion.rsp	S14,F22	Generic Service Completion Acknowledge

5 Service Parameter Mapping

5.1 Table 2 shows the mapping between message parameters defined by OSS and data items defined by SECS-II. For parameters specified in the definitions of an OSS 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
AttachToken	OBJTOKEN
AttrData	ATTRVAL
AttrName	ATTRID
AttrRein	ATTRRELN
ErrCode	ERRCODE
ErrText	ERRTEXT
ObjAck	OBJACK
ObjectAction	SVCNAME
ObjectActionReportStatus	DATAACK
ObjectActionStatus	SVCACK
ObjID	OBJID
ObjSpec	OBJSPEC
ObjType	OBJTYPE
OperationID	OPID
ServiceParameter	L,2 <SPNAME> <SPVAL>
ServiceParameterName	SPNAME
ServiceParameterValue	SPVAL
TargetSpec	TARGETSPEC

5.2 SECS-II Data Items Without Corresponding SEMI E94 Parameters

5.2.1 Table 3 contains the SECS-II data items that do not correspond to SEMI E39's service parameters.

Table 3 Additional Data Item Requirements Table

Function	SECS-II Data Item
Used to satisfy SECS-II conventions for linking a multi-block inquiry with a subsequent multi-block message. Neither required nor specified by OSS.	DATAID
Used to inform receiver of total message length size for SECS-II multi-block conventions. Neither required nor specified by SEMI E39.	DATALLENGTH
Used to satisfy SECS-II multi-block requirements. Neither required nor specified by OSS.	GRANT