

SEMI E94.1-0312 (Reapproved 0324) SPECIFICATION FOR SECS-II PROTOCOL FOR CONTROL JOB MANAGEMENT (CJM)

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NOTICE: The section symbol (§) is used to reference a numbered section, paragraph, or header and all subordinate paragraphs, headers, and embedded material (i.e., EXCEPTIONs, lists) therein. The paragraph symbol (§) is used to reference a particular numbered paragraph and embedded material therein. When duplicated (i.e., §§ and §§) the symbols are used to reference more than one section or paragraph, respectively.

1 Purpose

1.1 This Specification maps the services and data of SEMI E94 to SECS-II streams and functions and data definitions.

2 Scope

2.1 This is a specification covering equipment supporting automated control job management.

2.2 This Document applies to all implementations of SEMI E94 that use the SECS-II message protocol (SEMI E5). Compliance to this Standard requires compliance to both SEMI E94 and SEMI E5.

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 Limitations

3.1 This Specification applies to semiconductor equipment that also uses SEMI E40 Process Jobs.

4 Referenced Standards and Documents

4.1 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 E39.1 — Specification for SECS-II Protocol for Object Services (OSS)

SEMI E40 — Specification for Processing Management

SEMI E94 — Specification for Control Job Management

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

5 Terminology

5.1 None.

6 Mapping

6.1 This section shows the specific SECS-II streams and functions that shall be used for SECS-II implementation of the services defined in SEMI E94, as well as the parameter mapping for data attached to services.

6.2 Message Mapping

6.2.1 Services Message Mapping

6.2.1.1 Table 1 defines the relationships between SEMI E94 services and SECS-II messages.

Table 1 Services Message Mapping Table

<i>Service Name</i>	<i>Stream, Function</i>	<i>SECS-II Message Name</i>
Create Object	S14,F9/10	Create Object Request/Acknowledge (SEMI E39.1)
CJAbort	S16,F27/28	Control Job Command Request/Acknowledge
CJCancel	S16,F27/28	Control Job Command Request/Acknowledge
CJDeselect	S16,F27/28	Control Job Command Request/Acknowledge
CJHOQ	S16,F27/28	Control Job Command Request/Acknowledge
CJPause	S16,F27/28	Control Job Command Request/Acknowledge
CJResume	S16,F27/28	Control Job Command Request/Acknowledge
CJStart	S16,F27/28	Control Job Command Request/Acknowledge
CJStop	S16,F27/28	Control Job Command Request/Acknowledge

6.2.2 Event Message Mapping

6.2.2.1 Table 2 defines the relationships between SEMI E94 collection events and SECS-II messages.

Table 2 Event Message Mapping Table

<i>Event Name</i>	<i>Stream, Function</i>	<i>SECS-II Message Name</i>
All state model transitions	If SEMI E30 style events: S6,F11/12	If SEMI E30 style events: Event Report Send/Acknowledge

6.2.3 Parameter Mapping

6.2.3.1 Table 3 defines the relationships between SEMI E94 service parameters and SECS-II data definitions.

Table 3 Parameter to SECS-II Data Items Mapping

<i>Parameter Name</i>	<i>Range</i>	<i>SECS-II Data Item</i>
ACKcode	TRUE, FALSE	ACKA
Action	SAVEJOBS, REMOVEJOBS	CPVAL (U1) 0 = SAVEJOBS. This command does not destroy the Process Jobs specified by this Control Job. 1 = REMOVEJOBS. This command destroys all Process Jobs specified by this Control Job.
CtrlJobID	1–80 characters (Conforms to ObjID in SEMI E39.1, § 6.)	OBJID
ErrorCode	Enumerated	ERRCODE
ErrorInfo	Error	L,2 1. ErrorCode 2. ErrorText
ErrorText	1–80 characters	ERRTEXT
Status	Acknowledgement and error	L,2 1. ACKcode 2. ErrorInfo