

2013-06

SECS/GEM COMMUNICATION SPECIFICATION COMMON SPECIFICATION

Fully Automatic Dicing Saw

6000 SERIES

UJ6WVE*S00C

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Introduction

Purpose

This document is the SECS/GEM Communication Specification for the Fully Automatic Dicing Saw 6000 Series. It explains the SECS/GEM communication specifications common to the 6000 series.

For specifications different from each model (variables, constants, events, etc.), see the SECS/GEM Communication Specification Variables/Constants/Events List.

NOTICE

<p>This document explains the SECS/GEM communication specifications for the 6000 series standard machine. It does not cover communication specifications added or changed by a user-specified specification.</p>
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1. Application

Summary of this section

Section No.	Title
1-1	Related SEMI Standards
1-2	Application to GEM
1-3	Supplemental Explanation

1 – 1. Related SEMI Standards

Related SEMI standards

This specification complies with the following standards:

SEMI Standard	Title
E4-0699	SEMI Equipment Communications Standard 1 Message Transfer (SECS-I)
E5-0600	SEMI Equipment Communications Standard 2 Message Content (SECS-II)
E37-95	High-Speed SECS Message Services (HSMS) Generic Services
E37.1-96	High Speed Message Services HSMS-SS)
E30-0200A	Generic Model for Communications and Control of Manufacturing Equipment (GEM)

1 – 2. Application to GEM

Application to GEM

This specification complies with the GEM (Generic Equipment Model) for communication and control of semiconductor manufacturing equipment in SEMI E30-0200A.

This document describes the GEM detailed specification, which is necessary to mention here, the communication specification, which does not comply with the GEM, and the functions specific to the DFD6000 series.

GEM Compliance Statement

The 6000 series dicers satisfy the fundamental GEM requirements, and the performance is realized in accordance with all the applicable definitions, explanations, and requirements specified in these standards.

Therefore, the equipment constantly exhibits behaviors for the functions that comply with those specified in the GEM.

GEM Compliance Statement		
Fundamental GEM Requirements	Implemented	GEM-Compliant
State Models	■ Yes □ No	■ Yes (*1) □ No
Equipment Processing States	■ Yes □ No	
Host-Initiated S1,F13/F14 Scenario	■ Yes □ No	
Event Notification	■ Yes □ No	
On-Line Identification	■ Yes □ No	
Error Messages	■ Yes □ No	
Control (Operator-Initiated)	■ Yes □ No	
Documentation	■ Yes □ No	
Additional Capabilities	Implemented	GEM-Compliant (*2)
Establish Communications	■ Yes □ No	■ Yes □ No
Dynamic Event Report Configuration	■ Yes □ No	■ Yes □ No
Variable Data Collection	■ Yes □ No	■ Yes □ No
Trace Data Collection	■ Yes □ No	■ Yes □ No
Status Data Collection	■ Yes □ No	■ Yes □ No
Alarm Management	■ Yes □ No	■ Yes □ No
Remote Control	■ Yes □ No	■ Yes □ No
Equipment Constants	■ Yes □ No	■ Yes □ No
Process Program Management	■ Yes □ No	■ Yes □ No
Material Movement	□ Yes ■ No	□ Yes ■ No
Equipment Terminal Services	■ Yes □ No	■ Yes □ No
Clock	■ Yes □ No	■ Yes □ No
Limits Monitoring	■ Yes □ No	■ Yes □ No
Spooling	■ Yes □ No	■ Yes □ No
Control (Host-Initiated)	■ Yes □ No	■ Yes □ No

*1: Do not mark YES unless all fundamental GEM requirements are implemented and GEM-compliant.

*2: Additional capabilities may not be marked GEM-compliant unless the fundamental GEM requirements are GEM-compliant.

1 – 3. Supplemental Explanation

Data format of dates

ECID = 4010 (Time Format) is used for the data format of date, and 12 digits or 16 digits can be selected to use.

→See Section 3-2 [GEM PARAMETER Screen]

About protocol

Item	Description
Initial value of block number	Send: Starts from 1. Receive: Handles as normal even if it is 0.
Interleave	Both of sender and receiver support interleave. The maximum value of transaction can be set. →See Section 3-2 [GEM PARAMETER Screen]
Block interleave	Interruption of other transaction's block between the blocks of multi-block message transmission/reception is not permitted.
Management of system byte	Reply: Copies the system byte of the primary message directly. Send: Increments one each from the predetermined value.
Duplicate block detection	A duplicate block can be detected by setting. →See Section 3-3 [SECS PARAMETER Screen]

2. Connections

Connections

Physical connection method of this equipment differs depending on communication type, whether it is SECS-I (RS232C) or HSMS (Ethernet).

Communication method	Connection specification
SECS-I	RS232C communication Connector of the equipment: Male, 9 pins
HSMS	Ethernet communication Connector of the equipment: 10 Base-T or 100 Base-T

3. Communication Parameters Setup

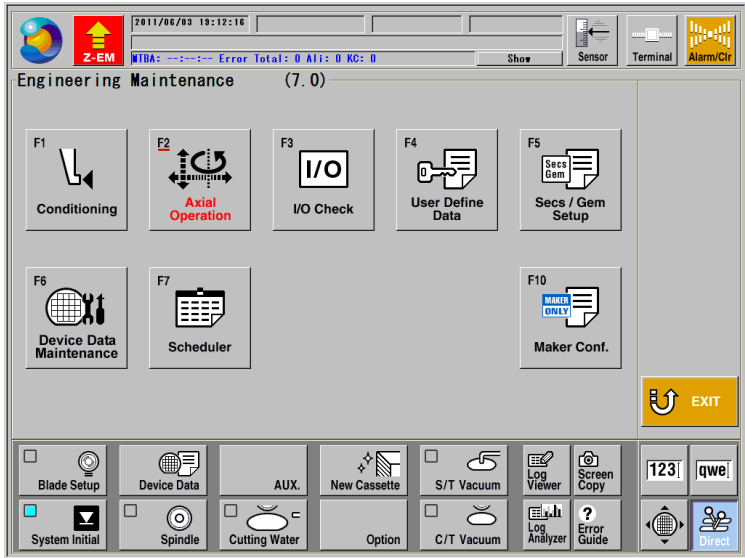
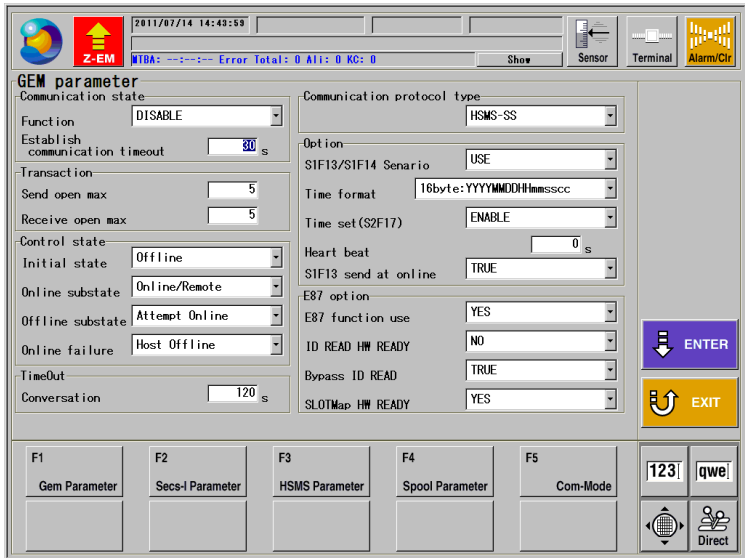
Summary of this section

The screens to set the communication parameters differ depending on whether the communication type is SECS-I communication (RS232C) or HSMS communication (Ethernet).

Section No.	Title	Applicable communication
3-1	Calling Up the Communication Parameters Setup Screens	-
3-2	GEM PARAMETER Screen	SECS-I/HSMS
3-3	SECS PARAMETER Screen	SECS-I
3-4	HSMS-SS PARAMETER Screen	HSMS
3-5	SPOOLING Screen	SECS-I/HSMS
3-6	COMMUNICATION MODE SELECT Screen	SECS-I/HSMS

3 – 1. Calling Up the Communication Parameters Setup Screens

Procedures for calling up the communication parameters setup screens

Step No.	Procedure			
1	Press the <F7> button on the MAIN MENU screen [0.0]. • The ENGINEERING MAINTENANCE screen [7.0] is called up.			
				
2	Press the <F5> button on the ENGINEERING MAINTENANCE screen [7.0]. • The GEM PARAMETER screen is called up.			
				
3	Press any of the following function buttons to call up the screen, and set communication parameters.			
	Button	Screen	Applicable communication	Reference section
	F1	GEM PARAMETER screen	SECS-I/HSMS	3-2
	F2	SECS PARAMETER screen	SECS-I	3-3
	F3	HSMS-SS PARAMETER screen	HSMS	3-4
	F4	SPOOLING screen	SECS-I/HSMS	3-5
	F5	COMMUNICATION MODE SELECT screen	SECS-I/HSMS	3-6

3 – 2. GEM PARAMETER Screen

GEM Parameter screen

Set parameters related to GEM.

The screenshot shows the GEM parameter screen with the following settings:

- Communication state:** Function: DISABLE, Establish communication timeout: 30 s.
- Transaction:** Send open max: 5, Receive open max: 5.
- Control state:** Initial state: Offline, Online substate: Online/Remote, Offline substate: Attempt Online, Online failure: Host Offline.
- TimeOut:** Conversation: 120 s.
- Communication protocol type:** HSMS-SS.
- Option:** SIF13/SIF14 Scenario: USE, Time format: 16byte:YYYYMMDDHHmmsscc, Time set (S2F17): ENABLE, Heart beat: 0 s, SIF13 send at online: TRUE.
- E87 option:** E87 function use: YES, ID READ HW READY: NO, Bypass ID READ: TRUE, SLOTMap HW READY: YES.

The bottom navigation bar includes function keys F1 (Gem Parameter), F2 (Secs-I Parameter), F3 (HSMS Parameter), F4 (Spool Parameter), F5 (Com-Mode), and a Direct button.

<Communication state> frame

Item	Description
Function	Select either to “ENABLE” or “DISABLE” the communication function. Direct entry editing is not possible.
Establish communication timeout	Set the communication establishment delay time value (range: 1 to 99 seconds).

<Transaction> frame

Item	Description
Send open max	Set the maximum number of messages (range: 0 to 10) that can be opened at the same time when sending SECS messages. 0: Sending and receiving interleave can not be performed.
Receive open max	Set the maximum number of message (range: 0 to 10) that can be opened at the same time when receiving SECS messages. 0: Sending and receiving interleave can not be performed.

<Control state> frame

Set the control status when the system boots up at <Initial state>, <Online substate> and <Offline substate>.

→For control status, see Section 4-2 [Control State].

Item	Description
Initial state	Offline: Initial state/Communication not possible, Substate is determined by OffLineSubState. Online: Initial state/Communication possible, Substate is determined by OnLineSubState
Online substate	Online/Local: OnLine connection, sets to local mode. Online/Remote: OnLine connection, sets to Remote mode.
Offline substate	Equipment Offline: Sets to the equipment OffLine state. Attempt Online: Sets to the Online connection standby state. Host Offline: Sets to the HostOffline state.

<Online failure> sets the control status when online fails.

Item	Description
Online failure	Equipment Offline: Sets to the equipment OffLine state. Host Offline: Sets to the HostOffline state.

<TimeOut> frame

Item	Description
Conversation	Set the conversation time out value (range: 1 to 120).

<Communication protocol type> frame

<div style="border: 1px solid black; padding: 10px; text-align: center;"> NOTICE </div> <p>If the protocol to be used is changed, restart the dicing saw.</p>	
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Item	Description
Communication protocol type	Select the protocol to be used. Select either “SECS-I (SECS-protocol)” or “HSMS-SS (HSMS-SS protocol).” Direct entry editing is not possible.

GEM Parameter screen (Continued)

<Option> frame

Item	Description
S1F13/S1F14 Scenario	Set whether the GEM conformity S1F13/F14 scenario operation will be performed on the host computer. This exists as support for host computers that do not support the communication establishment operation scenario. Select either "PASS (do not use)" or "USE (use)."
Time format	Set the data type to handle the date/time. 12Byte: YYMMDDHHmmss (Uses the definition of the old SECS.) 16Byte: YYYYMMDDHHmmsscc (Uses the definition of the new SECS (Y2K compliant).)
Time set (S2F17)	Set whether time matching will be performed when Online is established. ENABLE: Performs time matching using S2F17. DISABLE: Does not perform time matching.
Heart beat	Set whether connection confirmation will be performed periodically using S1F1 (range: 0 to 65,535 seconds). If specified at 0 second, this item will not be used.
S1F13 send at online	Set whether S1,F13 communication establishment scenario will be performed before S1,F1 communication performed at arbitrary timing. * The initial state of communication establishment (S1F13) to OnLine establishment (S1F1) is not included in this. TRUE: Performs S1F13 scenario. FALSE: Does not perform S1F13 scenario.

<87 option> frame

Settings related to material carrying compliant with the SEMI E87-0600 (Specification for Carrier Management (CMS)) are made here.

The standard function of the equipment does not support them. They will be supported by a user-specified specification.

3 – 3. SECS PARAMETER Screen

SECS Parameter screen

Set parameters related to the SECS-I protocol.

<Device ID> item

Item	Description
Device ID	This is an input item for the machine device ID number (range: 0 to 32767).

<RS-232C> frame

Item	Description
Baud rate	Select the serial communication speed (options: 300, 600, 1200, 2400, 4800, 9600, 19200).
Port number	Select the serial communication port number (options: COM2, COM3, COM4, COM5, COM10).
Contention	Displays the resolution set value for transmission conflict (fixed to “MASTER”).
Duplication check	Select either “YES (valid)” or “NO (invalid)” for the duplicate block check function.

SECS Parameter screen (Continued)

<Timeout/Retry> frame

Item	Description
T1 Character	Set the timeout value between characters (range: 0.1 to 10 seconds).
T2 Protocol	Set the protocol timeout value (range: 0.2 to 25 seconds).
T3 Reply	Set the reply timeout value (range: 1 to 120 seconds).
T4 Block	Set the timeout value between blocks (range: 1 to 120 seconds).
Retry	Set the send retry value (range: 0 to 31 times).

<Transaction> frame

Item	Description
Initial value	Set the initial value of the system byte transaction ID in the SECS-1 header.

3 – 4. HSMS-SS PARAMETER Screen

HSMS-SS Parameter screen

Set parameters related to the HSMS-SS protocol.

Also, press the <Equipment Network Setup> button located in the right portion of the screen, and make network settings necessary for HSMS communication through the displayed screen.

<Device ID> item

Item	Description
Device ID	This is an input item for the machine device ID number (range: 0 to 32767).

<Network> frame

<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>NOTICE</p> <p>If <Control mode> in the <Network> frame is set as "PASSIVE," it is not necessary to set <Port number> which is the IP address of the host.</p> </div>	
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Item	Description
Remote host	Enter connected host name (TCP/IP host file defined name) or IP address (range: "0.0.0.0" to "255.255.255.255").
Port number	Set service port or well-known socket number (range: 0 to 65535), which provides HSMS protocol service. Normally, avoid using 0 to 5,000 and reserve the area.
Control mode	Set the connection mode to either "ACTIVE (active connection)" or "PASSIVE (passive connection)." Make it a different setting to the connected host. Host (ACTIVE) → Equipment (PASSIVE) Host (PASSIVE) → Equipment (ACTIVE)
Remote confirm	Set the replacement connection mode to either "YES" (Valid) or "NO" (invalid). Replacement connection mode: If <Control mode> is set to "host (PASSIVE) – equipment (PASSIVE)" by mistake, both the host and equipment will continue to wait for communication connection from the ACTIVE side. In this case, no error will occur because both the host and equipment are in normal conditions. To avoid this situation, when equipment is set to "PASSIVE" and the waiting time for communication connection exceeds "T5 Separate," the function temporarily makes equipment ACTIVE and tries connection. • If it is set to "host (ACTIVE) – equipment (ACTIVE)," an error is generated due to connection failure, and therefore the replacement connection mode will not work.

<Timeout> frame

Item	Description
T3 Reply	Set the reply timeout value (range: 1 to 120 seconds).
T5 Separate	Set the separate timeout value (range: 1 to 240 seconds).
T6 Transaction	Set the transaction timeout value (range: 1 to 240 seconds).
T7 Select	Set the select timeout value (range: 1 to 240 seconds).
T8 Charactor	Set the timeout value between characters (range: 1 to 120 seconds).

<Transaction> frame

Item	Description
Initial value	Set the initial value of the system byte transaction ID in the HSMS header.

<Equipment Network Setup> button

NOTICE

If the <Equipment Network Setup> button is not displayed, go to the GEM PARAMETER screen and then the <Communication state> frame, and set the <Function> item to <DISABLE>.

Pressing the <Equipment Network Setup> button displays the network setup screen. Make settings according to either of the following procedures:

When the OS of the equipment is Windows NT:

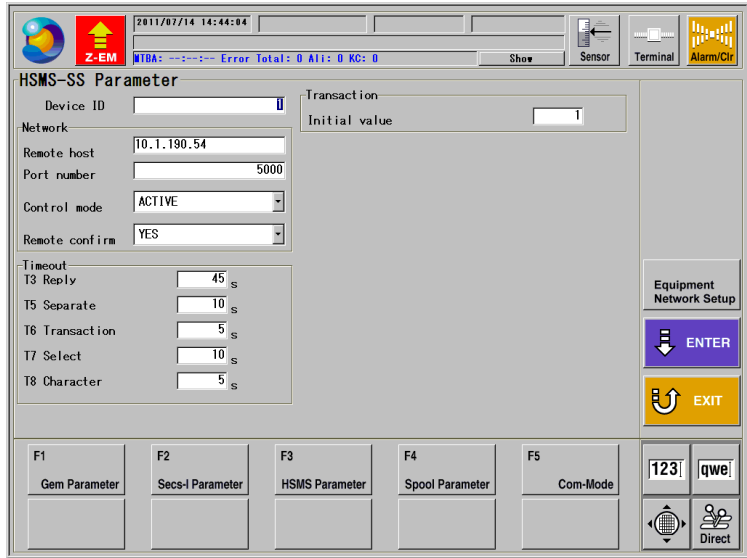
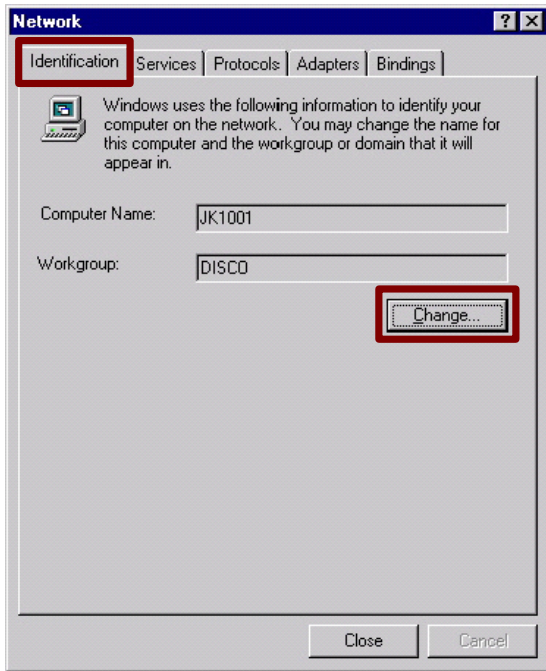
→ See Section 3-4-1 [Network Setting [In the Case of Windows NT]].

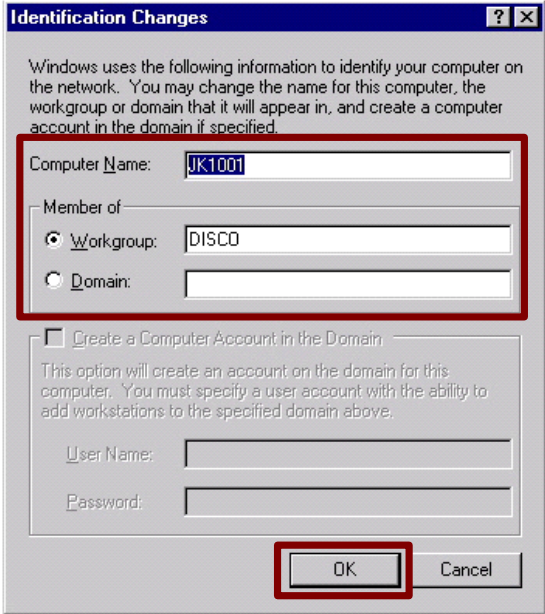
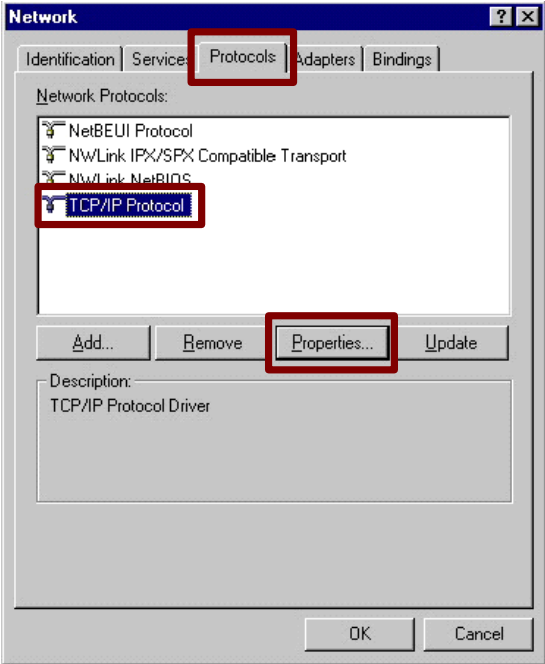
When the OS of the equipment is Windows XP:

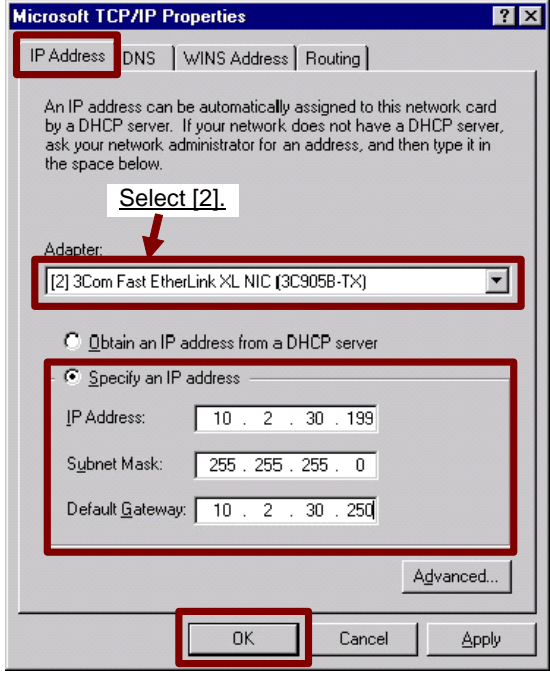
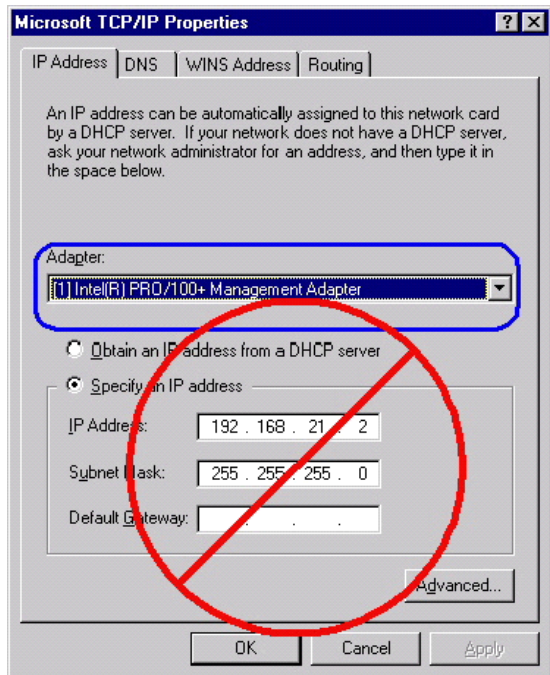
→ See Section 3-4-2 [Network Setting [In the Case of Windows XP]].

3 – 4 – 1. Network Setting [In the Case of Windows NT]

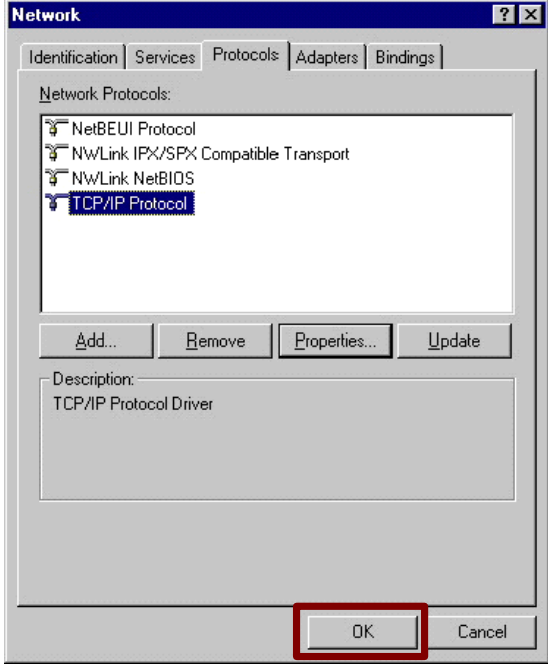
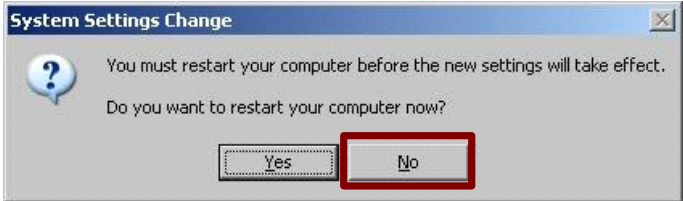
Network setting [In the case of Windows NT]

Step No.	Procedure
1	<p>Call up the HSMS-SS PARAMETER screen.</p>  <p>When the <Equipment Network Setup> button is not displayed: Go to the GEM PARAMETER screen and then the <Communication state> frame, and set the <Function> item to <DISABLE>. The <Equipment Network Setup> button will be displayed.</p>
2	<p>Press the <Equipment Network Setup> button.</p> <ul style="list-style-type: none"> The <Network> dialogue box is displayed
3	<p>Select the <Identification> tab from the <Network> dialog box and press the <Change> button.</p> 

Step No.	Procedure						
4	<p>Specify the items below into the <Identification Changes> dialog box and press the <OK> button.</p> <div></div> <table><tr><th>Item</th><th>Description</th></tr><tr><td>Computer Name</td><td>Set in accordance with the customer's status of use.</td></tr><tr><td>Member of</td><td>Set in accordance with the customer's status of use.</td></tr></table>	Item	Description	Computer Name	Set in accordance with the customer's status of use.	Member of	Set in accordance with the customer's status of use.
Item	Description						
Computer Name	Set in accordance with the customer's status of use.						
Member of	Set in accordance with the customer's status of use.						
5	<p>Select the <Protocols> tab from the <Network> dialog. And then, select "TCP/IP Protocol" from the list of <Network Protocols> and press the <Properties...> button.</p> <div></div>						

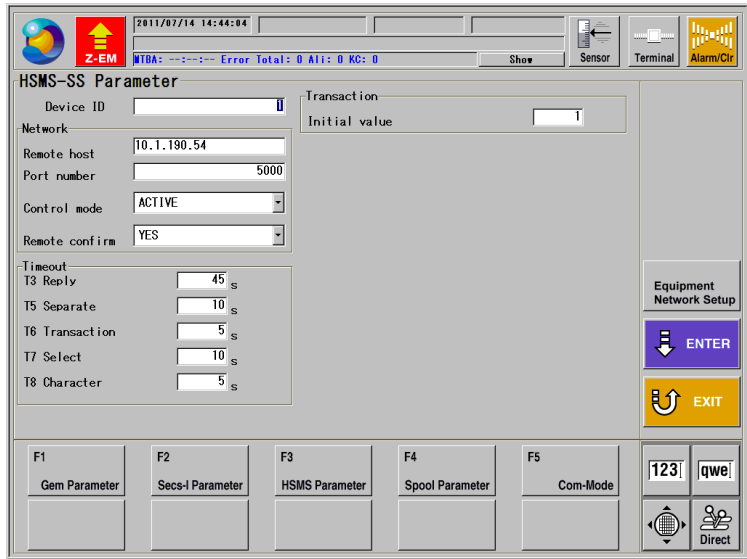
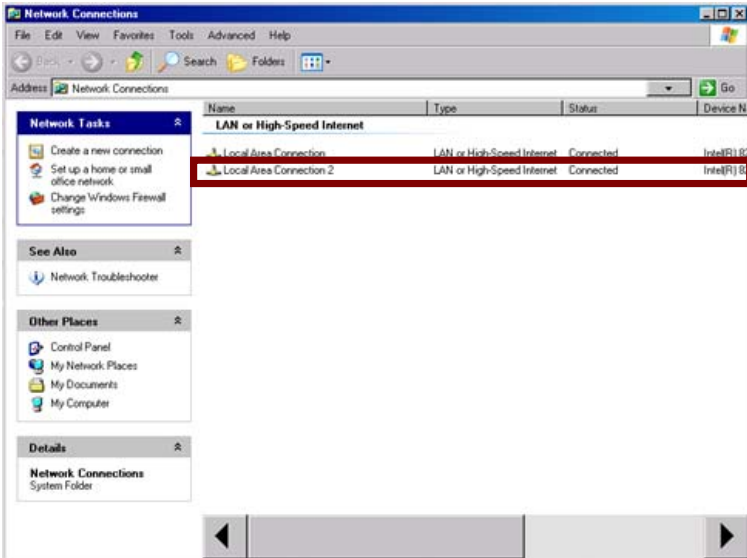
Step No.	Procedure
6	<p>Select <IP Address> tab from the <Microsoft TCP/IP Properties> dialog. Specify the items below and press the <OK> button.</p>  <p>Item</p> <p>Description</p> <p>Adapter</p> <p>IP Address</p> <p>Subnet Mask</p> <p>Default Gateway</p> <p>Select [2].</p> <p>After setting <Adapter> to [2], make settings according to the customer's usage.</p>
	<p>Do not change the IP address (192.168.21.2) with [1] selected at <Adapter>. If changed, the machine cannot boot up.</p> 

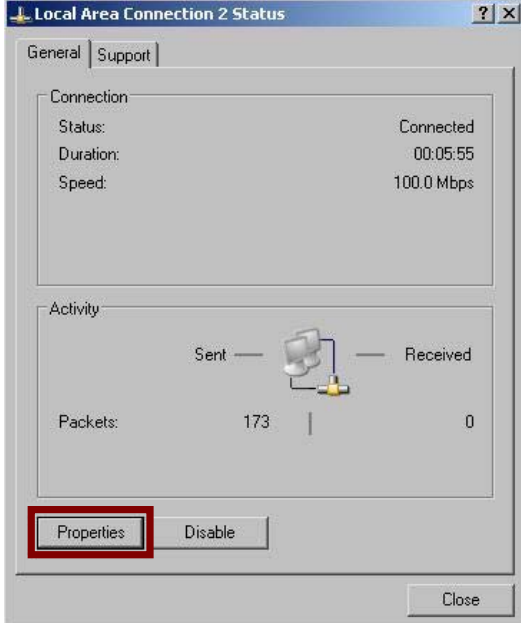
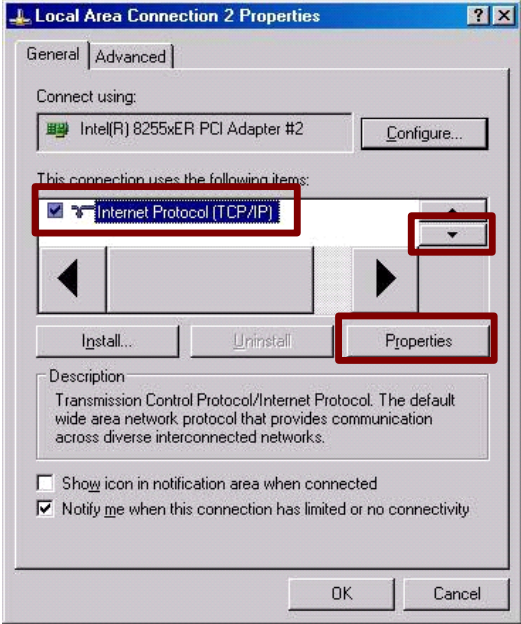
Network setting [In the case of Windows NT] (Continued)

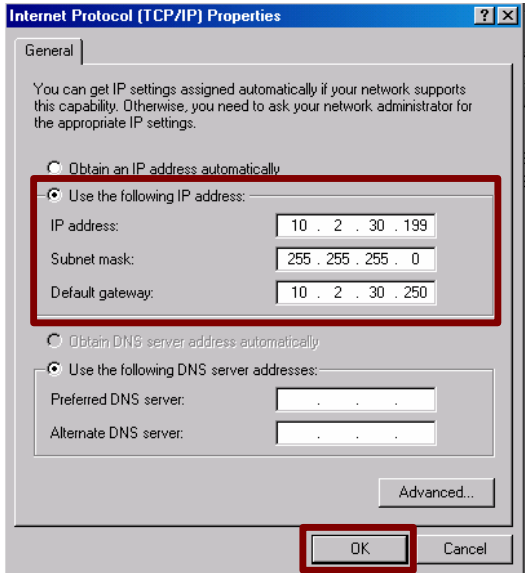
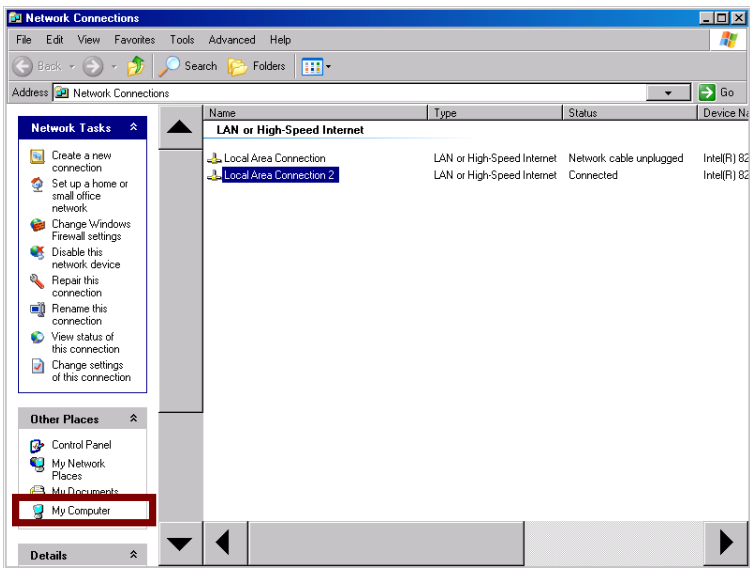
Step No.	Procedure
7	<p>Press the <OK> button on the <Network> dialogue box.</p> 
8	<p>The message from Windows confirming system restart appears. Press the <No> button.</p> 
9	<p>Restart the machine.</p>

3 – 4 – 2. Network Setting [In the Case of Windows XP]

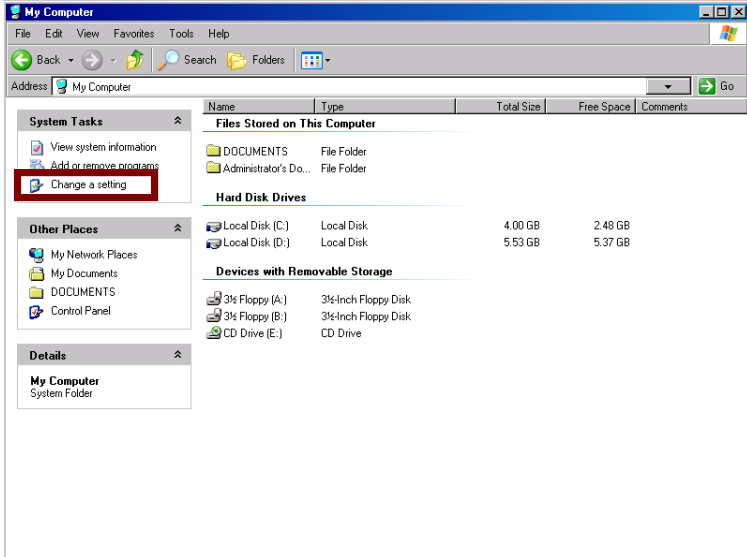
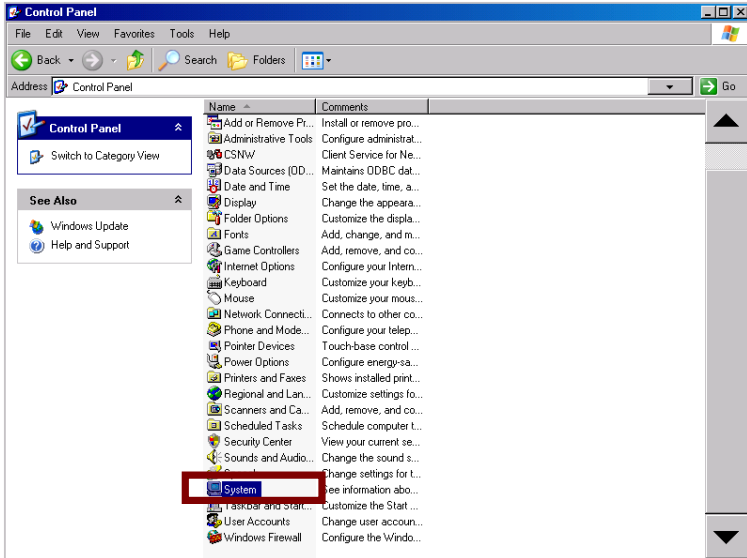
Network setting [In the case of Windows XP]

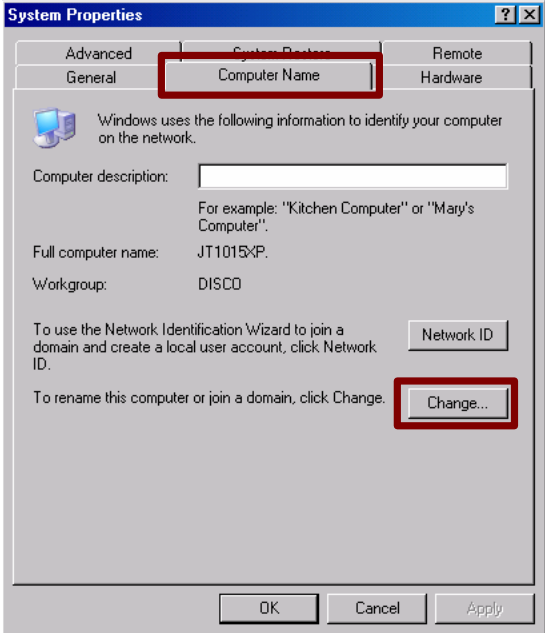
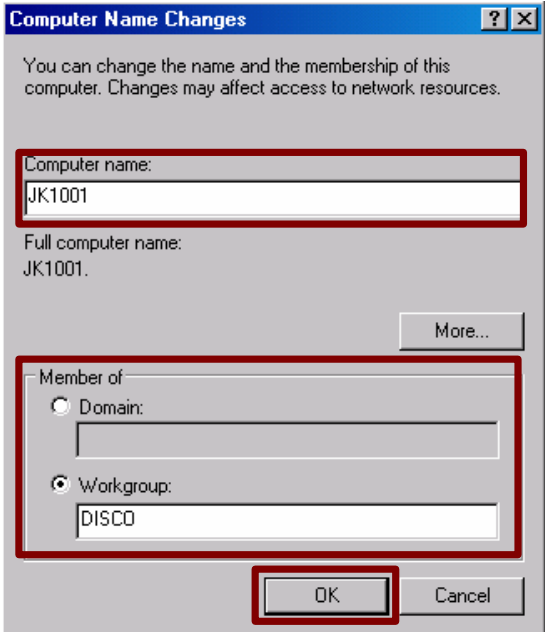
Step No.	Procedure
1	<p>Call up the HSMS-SS PARAMETER screen.</p>  <p>When the <Equipment Network Setup> button is not displayed: Go to the GEM PARAMETER screen and then the <Communication state> frame, and set the <Function> item to <DISABLE>. The <Equipment Network Setup> button will be displayed.</p>
2	<p>Press the <Equipment Network Setup> button.</p> <ul style="list-style-type: none"> The <Network Connections> window is displayed
3	<p>Double-click "<u>Local Area Connection 2</u>" on the <Network Connections> window.</p>  <p>Do not select <LocalArea Connection>. If <LocalArea Connection> is selected by mistake and the IP address setting is changed, the machine will not start up.</p>

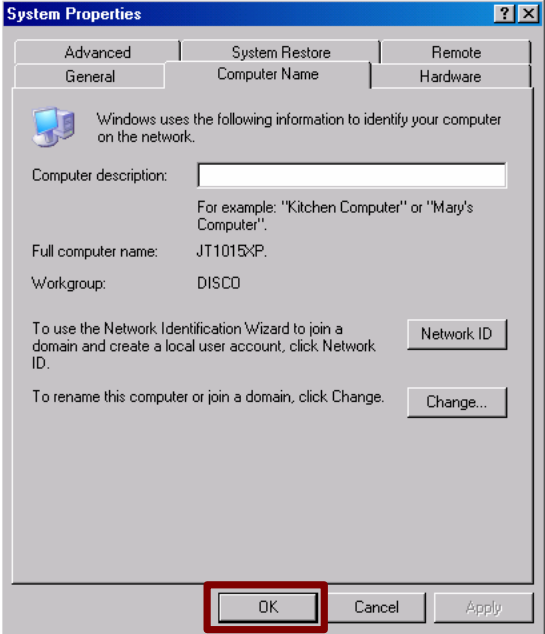
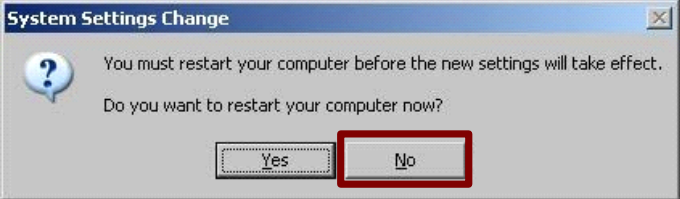
Step No.	Procedure
4	<p>Press the <Properties> button on the <LocalArea Connection 2 Status> dialog box.</p> 
5	<p>Press the <▼> button in the <LocalArea Connection 2 Properties> dialog and search and select "Internet Protocol [TCP/IP]". Then press the <Properties> button.</p> 

Step No.	Procedure						
6	<p>Specify the items below into the <Internet Protocol [TCP/IP] Properties> dialog box and press the <OK> button.</p>  <p>When the default of <IP address> is "192.168.21.2," <LocalArea Connection> has been selected by mistake in Step 3. Do not change the <IP address> setting. If it is changed, the machine will not start up.</p> <table border="1"> <thead> <tr> <th>Item</th><th>Description</th></tr> </thead> <tbody> <tr> <td>IP Address</td><td rowspan="3">Set in accordance with the customer's status of use.</td></tr> <tr> <td>Subnet Mask</td></tr> <tr> <td>Default Gateway</td></tr> </tbody> </table>	Item	Description	IP Address	Set in accordance with the customer's status of use.	Subnet Mask	Default Gateway
Item	Description						
IP Address	Set in accordance with the customer's status of use.						
Subnet Mask							
Default Gateway							
7	<p>Next, set the "Computer Name". Double-click "My Computer" on the <Network Connections> window.</p> 						

Network setting [In the case of Windows XP] (Continued)

Step No.	Procedure
8	<p>Double-click "Change setting" on the <My Computer> window.</p> 
9	<p>Double-click "System" on the <Control Panel> window.</p> 

Step No.	Procedure						
10	<p>Select the <Computer Name> tab from the <System Properties> dialog box and press the <Change> button.</p> 						
11	<p>Specify the items below into the <Computer Name Changes> dialog box and press the <OK> button.</p>  <table border="1"> <thead> <tr> <th>Item</th><th>Description</th></tr> </thead> <tbody> <tr> <td>Computer Name</td><td>Set in accordance with the customer's status of use.</td></tr> <tr> <td>Member of</td><td>Set in accordance with the customer's status of use.</td></tr> </tbody> </table>	Item	Description	Computer Name	Set in accordance with the customer's status of use.	Member of	Set in accordance with the customer's status of use.
Item	Description						
Computer Name	Set in accordance with the customer's status of use.						
Member of	Set in accordance with the customer's status of use.						

Step No.	Procedure
12	<p>Press the <OK> button on the <System Properties> dialog box.</p> 
13	<p>The message from Windows confirming system restart appears. Press the <No> button.</p> 
14	<p>Close other windows. This completes the setting. Restart the machine.</p>

3 – 5. SPOOLING Screen

SPOOLING screen

Set parameters related to the spooling function.

The screenshot shows the SPOOLING screen with the following details:

- Top Bar:** Date/Time: 2011/07/14 14:44:07; MTBA: ---:---; Error Total: 0; Ali: 0; KC: 0. Buttons: Show, Sensor, Terminal, Alarm/Ctr.
- Spooling Section:**
 - Spool function: PASS (dropdown)
 - Max spool transmit: 10 Messages
 - Over write spool: TRUE (dropdown)
 - Spool max storage: 100 kbyte
 - Current status: Not ACTIVE
 - Status: Not ACTIVE
 - Actual count: 0, Total count: 0, Spool startTime: (empty)
 - Spool full: Not FULL, Spool fullTime: (empty)
- Set spool Stream/Function:**
 - S2: F17
 - S3: (empty)
 - S4: (empty)
 - S5: F1
 - S6: F1,F11
 - S7: (empty)
 - S8: (empty)
 - S9: (empty)
 - S10: (empty)
- Function Parameters (F1-F5):**
 - F1: Gem Parameter
 - F2: Secs-I Parameter
 - F3: HSMS Parameter
 - F4: Spool Parameter
 - F5: Com-Mode
- Right Side:** ENTER (blue button), EXIT (yellow button), 123 (numeric keypad icon), qwe (alphanumeric keypad icon), Direct (globe icon).

<Spool function> item

Item	Description
Spool function	Selects whether the spooling function will be used or not. PASS: Spooling function will not be used. USE: Spooling function will be used.

<Max spool transmit> item

Item	Description
Max spool transmit	Specify the maximum number of the messages to be sent to the host at a time (range: 1 to 999). "0" means that all the message will be sent to the host.

<Over write spool> item

Item	Description
Over write spool	Select whether the Spool will be overwritten or not. TRUE: Enables overwriting. FALSE: Disables overwriting.

<Spool max storage> item

Item	Description
Spool max storage	Set the size of the spool buffer inside the machine (range: 100~99999KB). The default setting is 100KB.

<Current status> frame

Displays the current status of the spooling function.

Item	Description
Status	Displays the current spool status.
Actual count	Displays the number of current messages in the spool.
Total count	Displays the total number of messages that have been spooled until now.
Spool startTime	Displays the spool start time.
Spool full	Displays whether the current spool is full or not.
Spool fullTime	Displays the time that the spool reached the full status.

<Set spool Stream/Function> frame

Set the possible spool message type.

Item	Description
S2–S10	Enter the function list for each stream from S2 to S10 using a comma to separate each function.

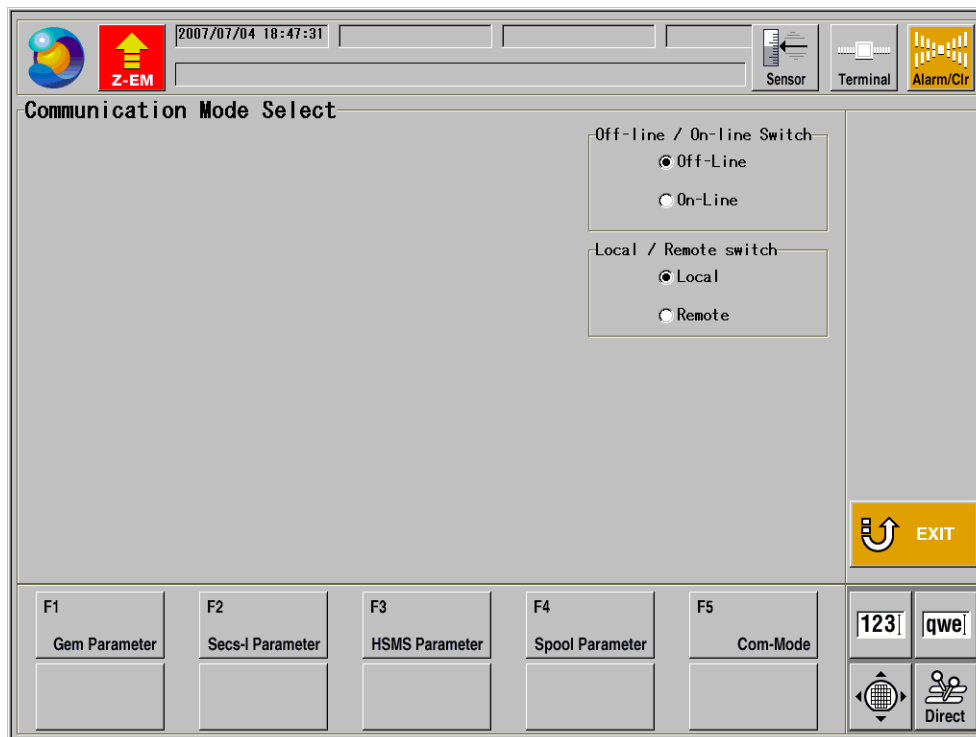
3 – 6. COMMUNICATION MODE SELECT Screen

COMMUNICATION MODE SELECT screen

Switch the control state.

This screen is displayed only when the <Function> is set to <ENABLE> in the <Communication state> frame on the GEM PARAMETER screen.

→For control status, see Section 4-2 [Control State].



<Off-Line/On-Line Switch> frame

Switch the communication state between the equipment and host.

Item	Description
Off-Line	Terminates the host communication.
On-Line	Establishes the host communication and maintain its state.

<Local/Remote switch> frame

Switch the mode of the On-Line state.

Item	Description
Local	This mode mainly uses the equipment in stand-alone operation. Events and alarms are received from the host.
Remote	This mode performs equipment operation according to the operation instructions from the host.

4. State Models

Summary of this section

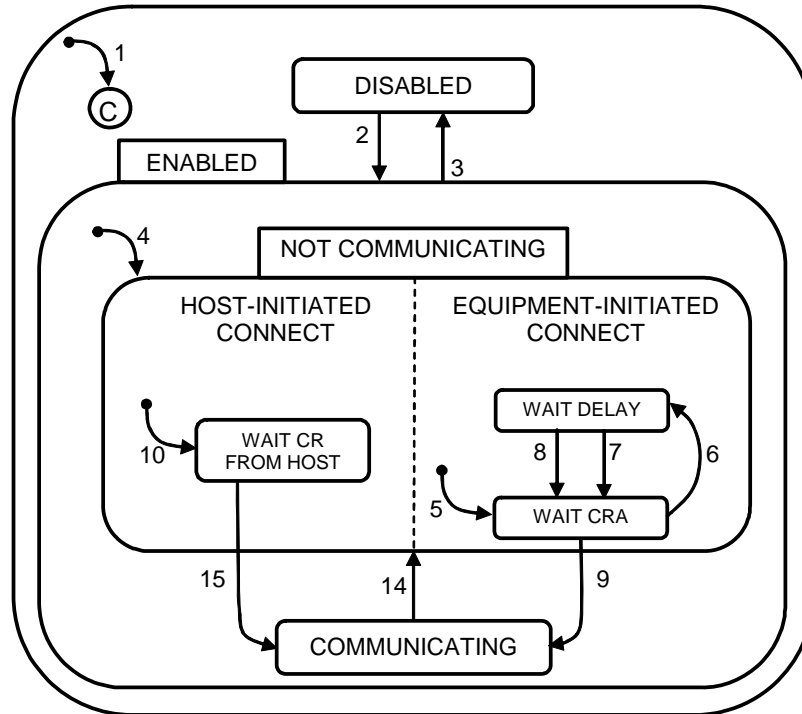
This section explains the system operation of the equipment.

Section No.	Title
4-1	Communications State Model
4-2	Control State Model
4-3	Equipment Processing States

4 – 1. Communications State Model

Communications state diagram

The diagram below shows the operation of the communication link for the equipment in the communication with the host.



State	Description
DISABLED	The DISABLED state is a possible system default. In this state SECS-II communication with a host computer is non-existent. If the operator switches from ENABLED to DISABLED, all SECS-II communications must cease immediately. Any messages queued to send shall be discarded, and all further action on any open transactions and conversations shall be terminated.
ENABLED	The ENABLED state is a possible system default.
NOT COMMUNICATING	ENABLED has two substates, COMMUNICATING and NOT COMMUNICATING. Whenever communications are enabled, either during system initialization or through operator selection, the substate of NOT COMMUNICATING is active until communications are formally established.
COMMUNICATING	
HOST-INITIATED CONNECT	The NOT COMMUNICATING state has two AND substates, HOST-INITIATED CONNECT and EQUIPMENT-INITIATED CONNECT, both of which are active whenever the equipment is NOT COMMUNICATING.
EQUIPMENT-INITIATED CONNECT	
WAIT CR FROM HOST	The WAIT CR FROM HOST state is the substate of HOST-INITIATED CONNECT. The equipment waits for an S1,F13 from the host.
WAIT DELAY	The EQUIPMENT-INITIATED CONNECT state has two substates, WAIT CRA and WAIT DELAY. Upon any entry to the NOT COMMUNICATING state, whenever EQUIPMENT-INITIATED CONNECT first becomes active, a transition to WAIT CRA occurs, the CommDelay timer is set to "expired," and an immediate attempt to send S1,F13 is made.
WAIT CRA	

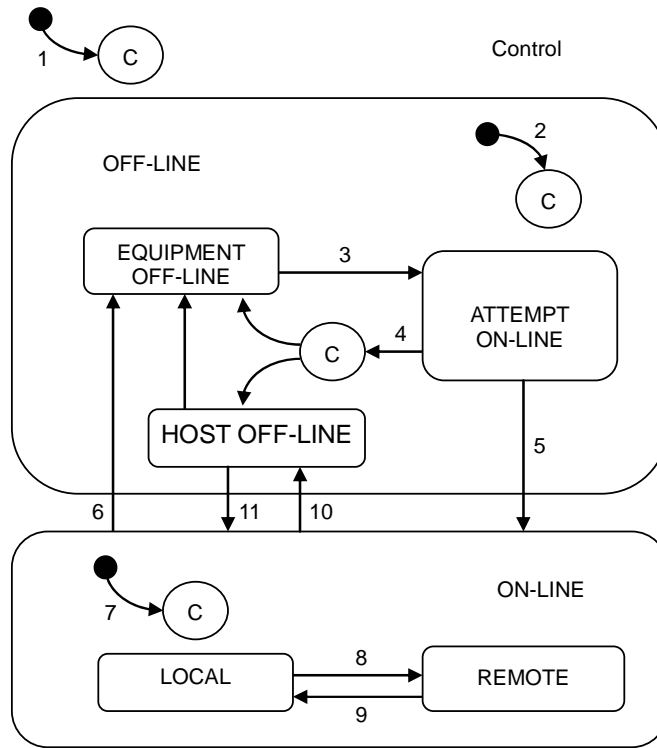
Communications state transition table

No.	Current State	Trigger	New State	Action	Comment
1	(Entry to COMMUNICATIONS)	System initialization.	System Default	None.	The system default may be set to DISABLED or ENABLED.
2	DISABLED	Operator switches from DISABLED to ENABLED	ENABLED	None.	SECS-II communications are enabled.
3	ENABLED	Operator switches from ENABLED to DISABLED	DISABLED	None.	SECS-II communications are prohibited.
4	(Entry to ENABLED)	Any entry to ENABLED state.	NOT COMMUNICATING	None.	May enter from system initialization to ENABLED or through operator switch to ENABLED.
5	(Entry to EQUIPMENT-INITIATED CONNECT)	(Any entry to NOT COMMUNICATING)	WAIT CRA	Initialize communications. Set CommDelay timer "expired." Send S1, F13.	Begin the attempt to establish communications.
6	WAIT CRA	Connection transaction failure.	WAIT DELAY	Initialize CommDelay timer. Dequeue all messages queued to send.	If appropriate, dequeued messages shall be placed in spool buffer in the order generated. Wait for timer to expire.
7	WAIT DELAY	CommDelay timer expired.	WAIT CRA	Send S1, F13	Wait for S1, F14. May receive S1, F13 from Host.
8	WAIT DELAY	Received a message other than S1, F13.	WAIT CRA	Discard message. No replay. Set CommDelay timer "expired." Send S1, F13.	Indicates opportunity to establish communications.
9	WAIT CRA	Received expected S1, F14 with COMMACK = 0.	COMMUNICATING	None.	Communications are established.
10	(Entry to HOST-INITIATED CONNECT)	(Any entry to NOT COMMUNICATING)	WAIT CR FROM HOST	None.	Wait for S1, F13 from Host.
14	COMMUNICATING	Communication failure. (See SEMI E4 or SEMI E37 for a protocol-specific definition of communication failure.)	NOT COMMUNICATING	Dequeue all messages queued to send.	Dequeued messages may be placed in spool buffer as appropriate.
15	WAIT CR FROM HOST	Received S1, F13.	COMMUNICATING	Send S1, F14 with COMMACK = 0.	Communications are established.

4 – 2. Control State Model

Control state diagram

The diagram below shows the collaboration level for the host and equipment to work collaborating each other.



State	Description
OFF-LINE	The equipment does not receive any control at all from the host and provides quite limited range of information. This condition is the lowest level of the control state. When the OFF-LINE state is active, operation of the equipment is performed by the operator at the operator console. While OFF-LINE, the equipment will respond with an Sx,F0 to any primary message from the host other than S1,F13 (Establish Communication Request) and S1,F17 (Request ON-LINE).
EQUIPMENT OFF-LINE	While this state is active, the system maintains the OFF-LINE state. It awaits operator instructions to attempt to ON-LINE.
ATTEMPT ON-LINE	While the ATTEMPT ON-LINE state is active, the equipment has responded to an operator instruction to attempt to go to the ON-LINE state. Upon activating this state, the equipment attempts to send S1,F1 to the host. Note that when this state is active, the system does not respond to operator actuation of either the ON-LINE or the OFF-LINE switch.
HOST OFF-LINE	While the HOST OFF-LINE state is active, the operator's intent is that the equipment be ON-LINE. However, the host has not agreed. Entry to this state may be due to a failed attempt to go ON-LINE or to the host's request that the equipment go OFF-LINE from ON-LINE. While this state is active, the equipment shall positively respond to any host's request to go ON-LINE (S1,F17). Such a request shall be denied when the HOST OFF-LINE state is not active.
ON-LINE	While the ON-LINE state is active, SECS-II messages may be exchanged and acted upon.
LOCAL	The middle level, ON-LINE/LOCAL, allows the host full access to information, but places some limits on how the host can affect the equipment's operations.
REMOTE	In the highest level, ON-LINE/REMOTE, the host may control the equipment to the full extent possible via SECS-II communication interface. Any stream/function can be used.

Control state transition table

No.	Current State	Trigger	New State	Action	Comment
1	(Undefined)	Entry into CONTROL state (system initialization)	CONTROL (Substate conditional on configuration)	None	Equipment may be configured to default to ON-LINE or OFF-LINE.
2	(Undefined)	Entry into OFF-LINE state	OFF-LINE (Substate conditional on configuration)	None	Equipment may be configured to default to any substate of OFF-LINE.
3	EQUIPMENT OFF-LINE	Operator actuates ON-LINE switch.	ATTEMPT ON-LINE	None	Note that an S1, F1 is sent whenever ATTEMPT ON-LINE is activated.
4	ATTEMPT ON-LINE	S1, F0	New state conditional on configuration	None	This may be due to a communication failure, reply timeout, or receipt of S1, F0. Configuration may be set to EQUIPMENT OFF-LINE or HOST OFF-LINE.
5	ATTEMPT ON-LINE	Equipment receives expected S1, F2 message from the host.	ON-LINE	None	Host is notified of transition to ON-LINE at transition 7.
6	ON-LINE	Operator actuates OFF-LINE switch.	EQUIPMENT OFF-LINE	None	"Equipment OFF-LINE" event occurs. Event reply will be discarded while OFF-LINE is active.
7	(Undefined)	Entry to ON-LINE state	ON-LINE (Substate conditional on REMOTE/LOCAL switch setting)	None	"Control State LOCAL" or "Control State REMOTE" event occurs. Event reported based on actual ON-LINE substate activated.
8	LOCAL	Operator sets front panel switch to REMOTE.	REMOTE	None	"Control State REMOTE" event occurs.
9	REMOTE	Operator sets front panel switch to LOCAL.	LOCAL	None	"Control State LOCAL" event occurs.
10	ON-LINE	Equipment accepts "Set OFF-LINE" message from host (S1, F15).	HOST OFF-LINE	None	"Equipment OFF-LINE" event occurs.
11	HOST OFF-LINE	Equipment accepts host request to go ON-LINE (S1, F17).	ON-LINE	None	Host is notified to transition to ON-LINE at transition 7.
12	HOST OFF-LINE	Operator actuates OFF-LINE switch.	EQUIPMENT OFF-LINE	None	"Equipment OFF-LINE" event occurs.

4 – 3. Equipment Processing States

Summary of this section

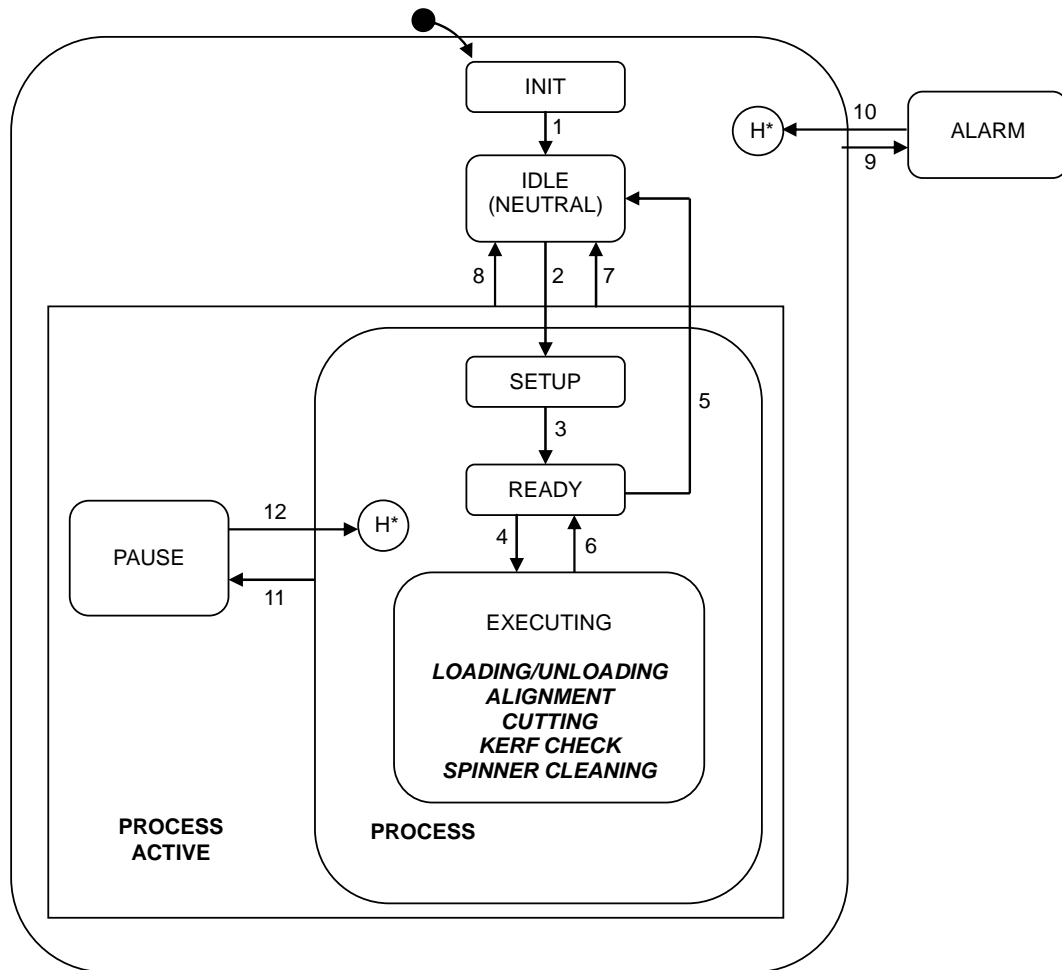
This section explains the operation for the equipment to process material.

Section No.	Title
4-3-1	Processing States
4-3-2	Processing Substates

4 – 3 – 1. Processing States

Processing state diagram

The diagram below shows the operation states of the whole equipment.
The equipment must generate collection events for each processing state transition.



State	Description
INIT	During initialization.
IDLE (NEUTRAL)	In this state, the equipment is awaiting instructions.
PROCESS ACTIVATE	This state is the parent of all substrates where the context of process program execution exists.
PROCESS	This state is the parent of those substates that refer to the active preparation and execution of a process program.
SETUP	During preparation for satisfying all external conditions necessary for process execution. For example, ensuring material is present at the equipment, input/output ports are in the proper state, parameters such as temperature and pressure values are within limits, etc. If all setup operations are completed, this becomes a fall through state and a transition to the next state takes place.
READY	In this state, the equipment is ready for process execution and is awaiting a START command from the operator or the host.
EXECUTING	The equipment is automatically executing process program, and is able to continue operation without external intervention.
PAUSE	Processing is suspended and the equipment is awaiting a command.
ALARM	Processing is suspended and the equipment is awaiting a command.

Processing state transition table

No.	Current State	Trigger	New State	Action	Comment
1	INIT	Equipment initialization complete.	IDLE	None	
2	IDLE (NEUTRAL)	Commit has been made to set up (full auto initialization). The F1 or F2 button was pressed on the Main Menu screen.	SETUP	None	
3	SETUP	All setup activity has completed and the equipment is ready to receive a START command.	READY	All axes initialization (e.g., alarm, elevator).	
4	READY	Full auto processing start Equipment has received a START command from the host or operator console	EXECUTING (FULL AUTO)	Wafer loading, alignment, cut and clean.	
5	READY	Full auto processing stop The EXIT or STOP button was pressed.	IDLE (NEUTRAL)	None	
6	EXECUTING	The full auto task has been completed.	READY	None	
7	PROCESSING ACTIVE	Full auto processing stop The EXIT or STOP button was pressed.	IDLE (NEUTRAL)	None	
8	PROCESSING ACTIVE	The equipment initialization completed after the SYS INIT button (Abort) was pressed.	IDLE (NEUTRAL)	None	
9	(No state)	The equipment transferred to the production paused state due to some kind of reason such as alarm generation.	ALARM	None	Alarm cancellation and retry. For this type of problem, an operator assist is usually required.
10	ALARM	The equipment received the ALARM RECOVERY command from the host or operator console.	Previous PROCESS substate	None	See Host Remote Command.
11	PROCESS	The operator pressed the STOP button or the deicer received any command contested with the STOP button from the host.	PAUSE	None	
12	PAUSE	Equipment has received a RESUME command from the host or operator console.	Previous PROCESS substate	None	

Processing state variable types

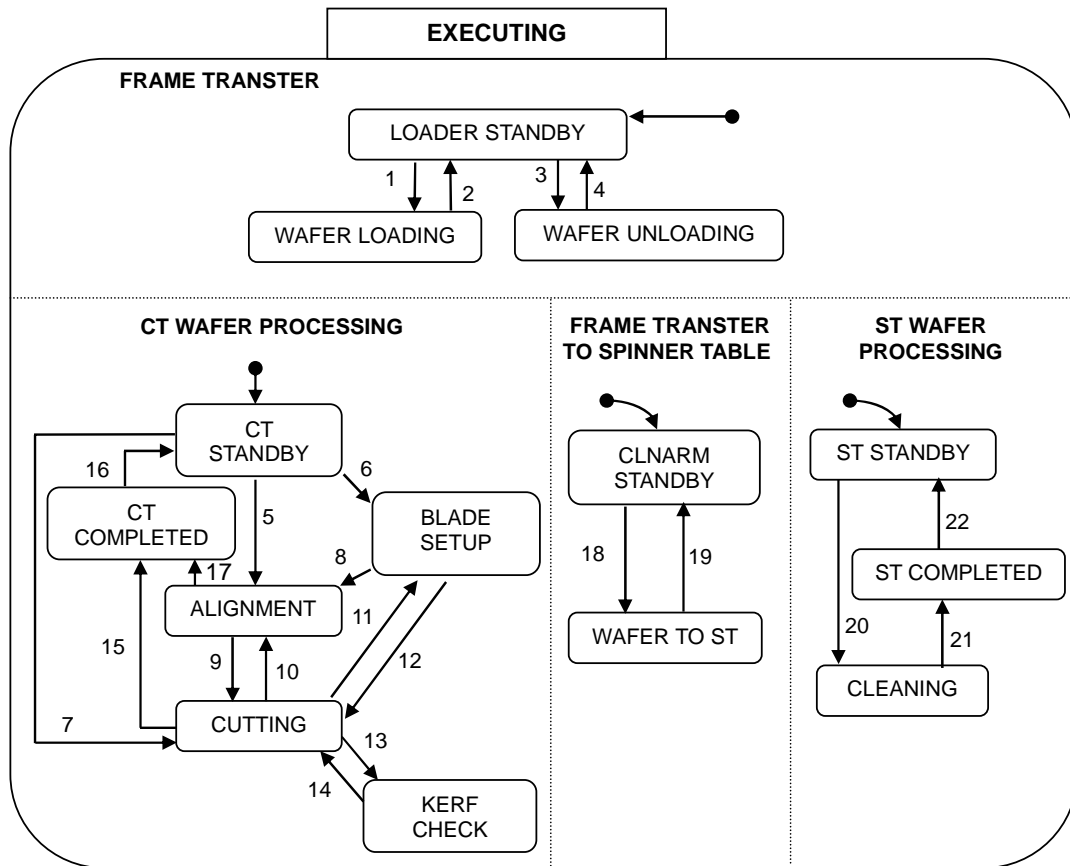
The state variables to show the current process state (Process State) and the previous process state (Previous Process State) are provided.

No.	SVID	SV NAME	SEMI GEM FORMAT	RANGE	DESCRIPTION
1	1009	ProcessState	51	0 = INIT 1 = IDLE 2 = SETUP 3 = READY 4 = EXECUTE 5 = PAUSE 6 = ALARM	
2	1008	PreviousProcessState	51	Same as above	

4 – 3 – 2. Processing Substates

Processing substate diagram

The diagram below shows the operation states of the processes in the equipment.
The equipment must generate collection events for each processing state transition.



State	Description	Comment
LOADER STANDBY	The loader/unloader is on standby to start.	Only for DFD machines. Not supported for EAD machines.
WAFER LOADING	Wafers are loading.	
WAFER UNLOADING	Wafers are unloading.	
CT STANDBY	CT is on standby to start.	
ALIGNMENT	Alignment is executed.	
BLADE SETUP	Blade setup is executing.	
CUTTING	Cutting wafers is executing.	
KERF CHECK	Kerf check is executing.	
CT COMPLETED	Processing on CT is completed.	
CLNARM STANDBY	ClnArm is on standby to start.	Only for DFD machines. Not supported for EAD machines.
WAFER TO ST	ClnArm is transferring a wafer to the spinner table.	
ST STANDBY	ST is on standby to start.	
CLEANING	ST is cleaning/drying wafers.	
ST COMPLETED	Processing on ST is completed.	

Processing substate transition table

No.	Current State	Trigger	New State	Action	Comment
1	LOADER STANDBY	The C/T is ready to load a new wafer, and there are unprocessed wafer(s) remaining in the cassette(s).	WAFER LOADING	None	*
2	WAFER LOADING	Finish loading the wafer to the C/T.	LOADER STANDBY	None	*
3	LOADER STANDBY	Start unloading the wafer.	WAFER UNLOADING	None	*
4	WAFER UNLOADING	The wafer is unloaded to the cassette.	LOADER STANDBY	None	*
5	CT STANDBY	When a wafer is loaded to the C/T, and the device is not set to perform setup before processing the wafer.	ALIGNMENT	None	
6	CT STANDBY	When a wafer is loaded to the C/T, and the device is not set to perform setup before processing the wafer.	BLADE SETUP	None	
7	CT STANDBY	When a wafer is loaded to C/T, and the device is not set to perform setup before processing the wafer, and when this device is cut without alignment.	CUTTING	None	
8	BLADE SETUP	The equipment completed the blade setup.	ALIGNMENT	None	
9	ALIGNMENT	The equipment completed the alignment.	CUTTING	None	
10	CUTTING	The equipment completed the cut and started the alignment.	ALIGNMENT	None	
11	CUTTING	If the device is set to perform blade setup during cutting.	BLADE SETUP	None	
12	BLADE SETUP	The equipment completed the blade setup.	CUTTING	None	
13	CUTTING	If the device is set to perform kerf check during cutting.	KERF CHECK	None	
14	KERF CHECK	The equipment completed the kerf check.	CUTTING	None	
15	CUTTING	The equipment completed all the CT processes.	CT COMPLETED	None	
16	CT COMPLETED	Transfer of the wafer to the ST started.	CT STANDBY	None	
17	ALIGNMENT	The equipment completed all the CT processes.	CT COMPLETED	None	
18	CLNARM STANDBY	Transfer of the wafer to the ST started.	WAFER TO ST	None	*
19	WAFER TO ST	Wafers are loaded to ST.	CLNARM STANDBY	None	*
20	ST STANDBY	Wafers are loaded to ST.	CLEANING	None	*
21	CLEANING	The equipment completed all the ST processes.	ST COMPLETED	None	*
22	ST COMPLETED	Wafer unloading started.	ST STANDBY	None	*

*: Only for DFD machines. Not supported for EAD machines.

Processing substate variable types

State variables for each sub-process state are provided as follows:

No.	SVID	SV NAME	SEMI GEM FORMAT	RANGE	DESCRIPTION
1	1106	CTStatus	52	<Stage state> 0 = Init 1 = Idle 2 = Alignment 3 = Cut 4 = Kerf check 5 = Set-up 7 = End 8 = Disable	
2	1107	SPStatus	52	<Stage state> 0 = Init 1 = Idle 2 = Clean/Dry 7 = End 8 = Disable	Only for DFD machines. Not supported for EAD machines.
3	1108	ClnArmStatus	52	<Stage state> 0 = Init 1 = Idle 2 = Load 8 = Disable	Only for DFD machines. Not supported for EAD machines.
4	1109	LoaderStatus	52	<Stage state> 0 = Init 1 = Idle 2 = Load 3 = Unload 8 = Disable	Only for DFD machines. Not supported for EAD machines.

5. Equipment Performance and Scenarios

Summary of this section

This section gives explanations and scenarios of the functions.

The explanations and scenarios, however, of the specifications that comply with the GEM provisions are omitted.

Section No.	Title
5-1	Establish Communications
5-2	Event Notification
5-3	Dynamic Event Report Configuration
5-4	Variable Data Collection
5-5	Trace Data Collection
5-6	Limits Monitoring
5-7	Status Data Collection
5-8	On-line Identification
5-9	Alarm Management
5-10	Remote Control
5-11	Equipment Constants
5-12	Process Program Management
5-13	Material Movement
5-14	Equipment Terminal Service
5-15	Error Message
5-16	Clock
5-17	Spooling
5-18	Control

5 – 1. Establish Communications

Outline

This function to establish communications complies with the GEM definition.

5 – 2. Event Notification

Outline

Valid events (CEID) are described in Section 2 [Event List] in the SECS/GEM Communication Specification Variables/Constants/Events List.

5 – 3. Dynamic Event Report Configuration

Outline

Dynamic event report configuration complies with the GEM definition.

5 – 4. Variable Data Collection

Outline

Variable data collection complies with the GEM definition.

5 – 5. Trace Data Collection

Outline

The number of trace IDs, which can be traced simultaneously, is up to 9 (1 to 10), and the number of the state variables that can be set is up to 9.

Limit of usable variables: Except for the List configuration variable

5 – 6. Limits Monitoring

Outline

The limit monitoring of the following state variable ID (SVID) can be performed.

Up to 10 state variables can be set, and seven (7) limit IDs can be used for one state variable.

List of state variable ID (whose limits monitoring is available)

[Common to both DFD and EAD machines]

SVID	SV Name	Format	Bytes	Unit	Default	Min.	Max.
1302	BLADE_EDGE	34	4	nm	N/A	N/A	N/A
1303	BLADE_EDGE2	34	4	nm	N/A	N/A	N/A
1304	BLADE_WASTE	34	4	nm	N/A	N/A	N/A
1305	BLADE_WADTE2	34	4	nm	N/A	N/A	N/A
1306	BLADE_LAST	34	4	nm	N/A	N/A	N/A
1307	BLADE_LAST2	34	4	nm	N/A	N/A	N/A
1380-1389	CH_Q[0-9]	34	4	%	N/A	0	100
1500	DCBL_REV	34	4	/min	0	0	60000
1501	DCBL_REV2	34	4	/min	0	0	60000
1502	DCBL_CUR	34	4	mA	0	0	9999999
1503	DCBL_CUR2	34	4	mA	0	0	9999999
1520	COUNT_WORK	34	4	N/A	N/A	N/A	N/A
1521	COUNT_WORK2	34	4	N/A	N/A	N/A	N/A

[Only for EAD machines]

SVID	SV Name	Format	Bytes	Unit	Default	Min.	Max.
3810-3814	CH_Q_B[0-4]	34	4	%	N/A	N/A	N/A

5 – 7. Status Data Collection

Outline

Valid status variables are described in Section 1-1 [List of Variables] in the SECS/GEM Communication Specification Variables/Constants/Events List.

5 – 8. On-line Identification

Outline

The on-line identification of the equipment complies with the GEM definition.

5 – 9. Alarm Management

Outline

Types of alarms that occur on this equipment are described in Section 3 [Alarm List] in the SECS/GEM Communication Specification Variables/Constants/Events List.

5 – 10. Remote Control

Summary of this section

This section explains the function that controls equipment operation from the host.
The remote commands supported are different between the DFD and EAD machines.

Section No.	Title
5-10-1	Remote Command [for DFD machines]
5-10-2	Remote Command [for EAD machines]
5-10-3	Parameters Added to Remote Command

5 – 10 – 1. Remote Command [for DFD machines]

Remote / Host command list [for DFD machines]

The following remote commands are supported on DFD machines:

Remote Command	RCMD	Execution conditions	Operation explanation
	S2F41		
START (Single device)	"START_S"	<Machine processing state> READY <Screen displayed> SINGLE DEVICE FULL AUTOMATION screen [1.0]	Starts a single device full automation process.
START (Multi device)	"START_M"	<Machine processing state> READY <Screen displayed> MULTIPLE DEVICE FULL AUTOMATION screen [1.6]	Starts a multi device full automation process.
PP-SELECT (Single device)	"PP_SELECT_S"	<Machine processing state> IDLE or SETUP or READY <Screen displayed> MAIN MENU screen [0.0] or SINGLE DEVICE FULL AUTOMATION screen [1.0]	Selects a process program for single device full automation processing.
PP-SELECT (Multi device)	"PP_SELECT_M"	<Machine processing state> IDLE or SETUP or READY <Screen displayed> MAIN MENU screen [0.0] or MULTIPLE DEVICE FULL AUTOMATION screen [1.6]	Selects a process program for multi device full automation processing.
STOP	"STOP"	<Machine processing state> EXECUTING	Stops the full automation process. Alignment, cutting, or cleaning operation continues until it is completed. The operation after it is completed is performed according to the full automation stop mode in the function data.
PAUSE	"PAUSE"	<Machine processing state> EXECUTING	Temporarily stops the alignment or cutting operation. The operation is the same as when pressing the <START/STOP> button.
RESUME	"RESUME"	<Machine processing state> PAUSE	Cancels the temporary stop of the alignment or cutting operation. The operation is the same as when pressing the <START/STOP> button.
PAUSE	"PAUSE_H"	<Machine processing state> EXECUTING	Temporarily stops the alignment or cutting operation. The temporary stop can be canceled by only the RESUME_H command from the host. It cannot be canceled by pressing the <START/STOP> button.
RESUME	"RESUME_H"	<Machine processing state> PAUSE	Cancels the temporary stop by the PAUSE_H command.
ABORT	"ABORT"	<Machine processing state> EXECUTING or PAUSE	Executes forced system initialization. The operation is the same as when pressing the <System Initial> button.

Remote / Host command list [for DFD machines] (Continued)

Remote Command	RCMD S2F41	Execution conditions	Operation explanation
Emergency stop	"EMERGENCY"	<Machine processing state> ANY	This is emergency evacuation operation of the Z-axis. The operation is the same as when pressing the <Z-EM> button.
New cassette	"NEW"	<Machine processing state> IDLE or SETUP or READY	Resets the cassette processing state. The operation is the same as when pressing the <New Cassette> button.
System initialize	"I"	<Machine processing state> IDLE or SETUP or READY	Executes system initialization. The operation is the same as when pressing the <System Initial> button.
Fullauto initialize (Single device)	"INIT_S"	<Machine processing state> IDLE <Screen displayed> MAIN MENU screen [0.0]	Initializes the single device full automation operation. The SINGLE DEVICE FULL AUTOMATION screen [1.0] is displayed.
Fullauto initialize (Multi device)	"INIT_M"	<Machine processing state> IDLE <Screen displayed> MAIN MENU screen [0.0]	Initializes the multi device full automation operation. The MULTIPLE DEVICE FULL AUTOMATION screen [1.6] screen is displayed.
Clear	"CLEAR"	<Machine processing state> IDLE or SETUP or READY	Unloads all the wafers in the machine to the cassette. No cleaning operation is performed.
Alignment retry	"1"	<Machine processing state> ALARM <Screen displayed> ERROR RECOVERY (ALIGNMENT) screen	Executes the alignment operation again.
Alignment reject	"2"	<Machine processing state> ALARM <Screen displayed> ERROR RECOVERY (ALIGNMENT) screen	Stops the alignment operation and unloads the wafer.
Kerf check retry	"3"	<Machine processing state> ALARM <Screen displayed> ERROR RECOVERY (KERF CHECK) screen	Executes the kerf check operation again.
Kerf check reject	"4"	<Machine processing state> ALARM <Screen displayed> ERROR RECOVERY (KERF CHECK) screen	Stops the kerf check operation and displays the STOP CORRECTION screen.
Wafer loading stop	"5"	<Machine processing state> EXECUTING	Stops the loading of wafers. The operation is the same as when pressing the <Pause> button.
Wafer loading start	"6"	<Machine processing state> EXECUTING	Cancels the stop of loading wafers. The operation is the same as when pressing the <Restart> button.
Precut start	"7"	<Machine processing state> EXECUTING or PAUSE	Starts a precut operation. The operation is the same as when pressing the <Precut ON> button.

Remote / Host command list [for DFD machines] (Continued)

Remote Command	RCMD	Execution conditions	Operation explanation
	S2F41		
PP-SELECT, New cassette, Fullauto initialize (Single device), START (Single device)	"PP_START_S"	<Machine processing state> READY <Screen displayed> MAIN MENU screen [0.0] or SINGLE DEVICE FULL AUTOMATION screen [1.0]	Executes processing of the "PP_SELECT_S," "NEW," "INIT_S," and "START_S" commands by one operation.
PP-SELECT, New cassette, Fullauto initialize (Multi device), START (Multi device)	"PP_START_M"	<Machine processing state> READY <Screen displayed> MAIN MENU screen [0.0] or MULTIPLE DEVICE FULL AUTOMATION screen [1.6]	Executes processing of the "PP_SELECT_M," "NEW," "INIT_M," and "START_M" commands by one operation.
LOCAL request	"GO_LOCAL"	<Machine processing state> ANY	Switches to local mode. The request is allowed when the machine is in local or remote mode.
REMOTE request	"GO_REMOTE"	<Machine processing state> ANY	Switches to remote mode. The request is allowed when the machine is in local or remote mode.
Error recovery	"RECOVERY"	<Machine processing state> EXECUTING	Clears the alarm when an error has occurred, and displays the recovery screen.

5 – 10 – 2. Remote Command [for EAD machines]

Remote / Host command list [for EAD machines]

The following remote commands are supported on EAD machines:

Remote Command	RCMD	Execution conditions	Operation explanation
	S2F41		
START	"START_S"	<Machine processing state> READY <Screen displayed> FULL AUTOMATION screen [1.0]	Starts a full automation process.
PP-SELECT	"PP_SELECT_S"	<Machine processing state> IDLE or SETUP or READY <Screen displayed> MAIN MENU screen [0.0] or FULL AUTOMATION screen [1.0]	Selects a process program for full automation processing.
STOP	"STOP"	<Machine processing state> EXECUTING	Stops the full automation process. Alignment, cutting, or cleaning operation continues until it is completed. The operation after it is completed is performed according to the full automation stop mode in the function data.
PAUSE	"PAUSE"	<Machine processing state> EXECUTING	Temporarily stops the alignment or cutting operation. The operation is the same as when pressing the <START/STOP> button.
RESUME	"RESUME"	<Machine processing state> PAUSE	Cancels the temporary stop of the alignment or cutting operation. The operation is the same as when pressing the <START/STOP> button.
PAUSE	"PAUSE_H"	<Machine processing state> EXECUTING	Temporarily stops the alignment or cutting operation. The temporary stop can be canceled by only the RESUME_H command from the host. It cannot be canceled by pressing the <START/STOP> button.
RESUME	"RESUME_H"	<Machine processing state> PAUSE	Cancels the temporary stop by the PAUSE_H command.
ABORT	"ABORT"	<Machine processing state> EXECUTING or PAUSE	Executes forced system initialization. The operation is the same as when pressing the <System Initial> button.
Emergency stop	"EMERGENCY"	<Machine processing state> ANY	This is emergency evacuation operation of the Z-axis. The operation is the same as when pressing the <Z-EM> button.
System initialize	"I"	<Machine processing state> IDLE or SETUP or READY	Executes system initialization. The operation is the same as when pressing the <System Initial> button.
Fullauto initialize	"INIT_S"	<Machine processing state> IDLE <Screen displayed> MAIN MENU screen [0.0]	Initializes the full automation operation. Displays the FULL AUTOMATION screen [1.0].

Remote / Host command list [for EAD machines] (Continued)

Remote Command	RCMD	Execution conditions	Operation explanation
	S2F41		
Alignment retry	"1"	<Machine processing state> ALARM <Screen displayed> ERROR RECOVERY (ALIGNMENT) screen	Executes the alignment operation again.
Alignment reject	"2"	<Machine processing state> ALARM <Screen displayed> ERROR RECOVERY (ALIGNMENT) screen	Stops the alignment operation and unloads the wafer.
Kerf check retry	"3"	<Machine processing state> ALARM <Screen displayed> ERROR RECOVERY (KERF CHECK) screen	Executes the kerf check operation again.
Kerf check reject	"4"	<Machine processing state> ALARM <Screen displayed> ERROR RECOVERY (KERF CHECK) screen	Stops the kerf check operation and displays the STOP CORRECTION screen.
Precut start	"7"	<Machine processing state> EXECUTING or PAUSE	Starts a precut operation. The operation is the same as when pressing the <Precut ON> button.
LOCAL request	"GO_LOCAL"	<Machine processing state> ANY	Switches to local mode. The request is allowed when the machine is in local or remote mode.
REMOTE request	"GO_REMOTE"	<Machine processing state> ANY	Switches to remote mode. The request is allowed when the machine is in local or remote mode.
Error recovery	"RECOVERY"	<Machine processing state> EXECUTING	Clears the alarm when an error has occurred, and displays the recovery screen.

The following commands are not supported on EAD machines:

Remote Command	RCMD
	S2F41
START (multi device)	"START_M"
PP-SELECT	"PP_SELECT_M"
New Cassette	"NEW"
Fullauto initialize (multi device)	"INIT_M"
Clear	"CLEAR"
Wafer loading stop	"5"
Wafer loading start	"6"
PP-SELECT, New cassette, START (single device)	"PP_START_S"
PP-SELECT, New cassette, START (multi device)	"PP_START_M"

5 – 10 – 3. Parameters Added to Remote Command

“PP_SELECT_S” or “PP_START_S” command

CPNAME	CPVAL FORMAT	DESCRIPTION
Port	B(1)	Port number (1 = Port #1, 2 = Port #2)*
DEV_NO	A(80)	Recipe number

Note: The standard function supports “Port#1” only. “Port#2” is supported by a user-specified specification.

“PP_SELECT_M” or “PP_START_M” command

CPNAME	CPVAL FORMAT	DESCRIPTION	
Port	B(1)	Port number (1 = Port #1, 2 = Port #2)*	
M_DEVNO[0]	Max A(80)	1st recipe, Recipe number	Specify necessary sets of recipe number and slot number.
PCE_NO[0]	UINT(1)	1st recipe, Start slot position	
M_DEVNO[1]	Max A(80)	2nd recipe, Recipe number	
PCE_NO[1]	UINT(1)	2nd recipe, Start slot position	
:	:	:	
:	:	:	
M_DEVNO[7]	Max A(80)	:	
PCE_NO[7]	UINT(1)	7th recipe, Recipe number	

Note: The standard function supports “Port#1” only. “Port#2” is supported by a user-specified specification.

“START_S” or “START_M” command

When PPID is selected already by ”PP-SELECT_S” or “PP-SELECT_M” only port number is given as a parameter.

CPNAME	CPVAL FORMAT	DESCRIPTION
Port	B(1)	Port number (1 = Port #1, 2 = Port #2)*

Note: The standard function supports “Port#1” only. “Port#2” is supported by a user-specified specification.

DEV_NO parameter set

Specification of a recipe name which includes a pass name is available in DEV_NO parameters set. Recipe data are usually maintained in the DEV folder, but according to user specification, it is available to add a user folder for storing recipe data under DEV folder.

If there is no specification of pass name in a DEV_NO parameter, the target recipe data should stay in default DEV folder. If the specific pass name is specified, the recipe data in the specific pass name folder is referred (see the sample below).

Sample: DEV_NO=Rate¥AAA: User folder (Rate) is specified. (‘¥’: Back slash)

5 – 11. Equipment Constants

Outline

Valid equipment constants are described in Section 1-2 [List of Constants] in the SECS/GEM Communication Specification Variables/Constants/Events List.

5 – 12. Process Program Management

Outline

This equipment supports processes without formats. Also, process programs with formats are not supported by the standard function.

Specification of a recipe name which includes a pass name is available in DEV_NO parameters set. Recipe data are usually maintained in the DEV folder, but according to user specification, it is available to add a user folder for storing recipe data under DEV folder.

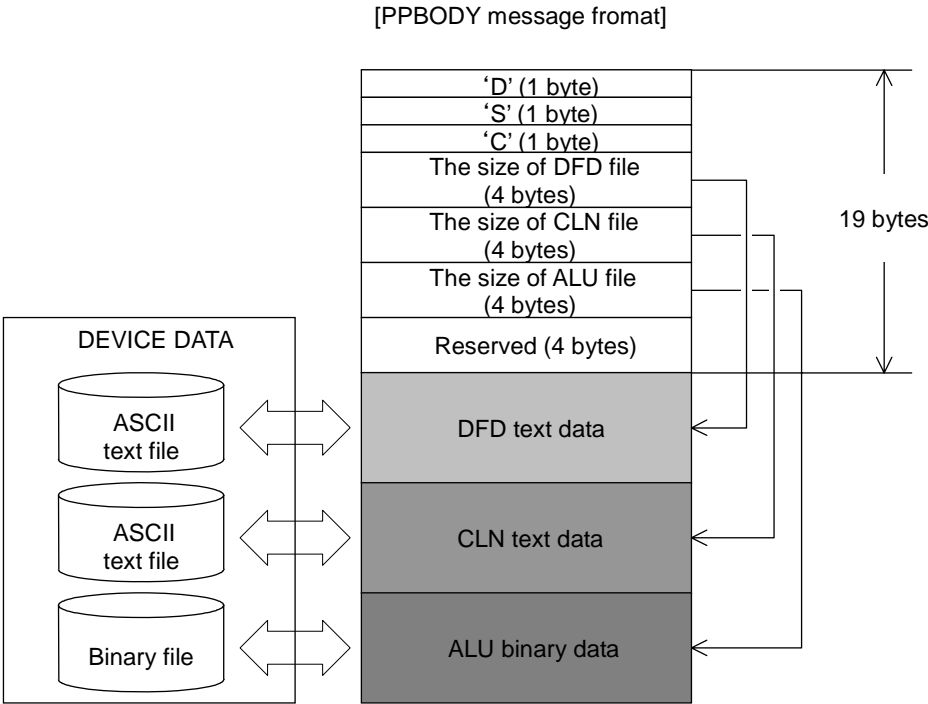
If there is no specification of pass name in a DEV_NO parameter, the target recipe data should stay in default DEV folder. If the specific pass name is specified, the recipe data in the specific pass name folder is referred (see the sample below).

Sample: DEV_NO=Rate¥AAA: User folder (Rate) is specified. (¥: Back slash)

Process program without specific format (PPBODY)

Process program without specific format (PPBODY) has the following process parameter values for each process step in text file format.

To check the adequacy of PPBODY, follow the following message format. Also, when creating data at the host and checking the adequacy, perform it at the host's (the customer's) own risk.



Note: Each file size is described in the big-endian format.

5 – 13. Material Movement

Outline

This function is not supported by the standard function. It is supported by a user-specified specification.

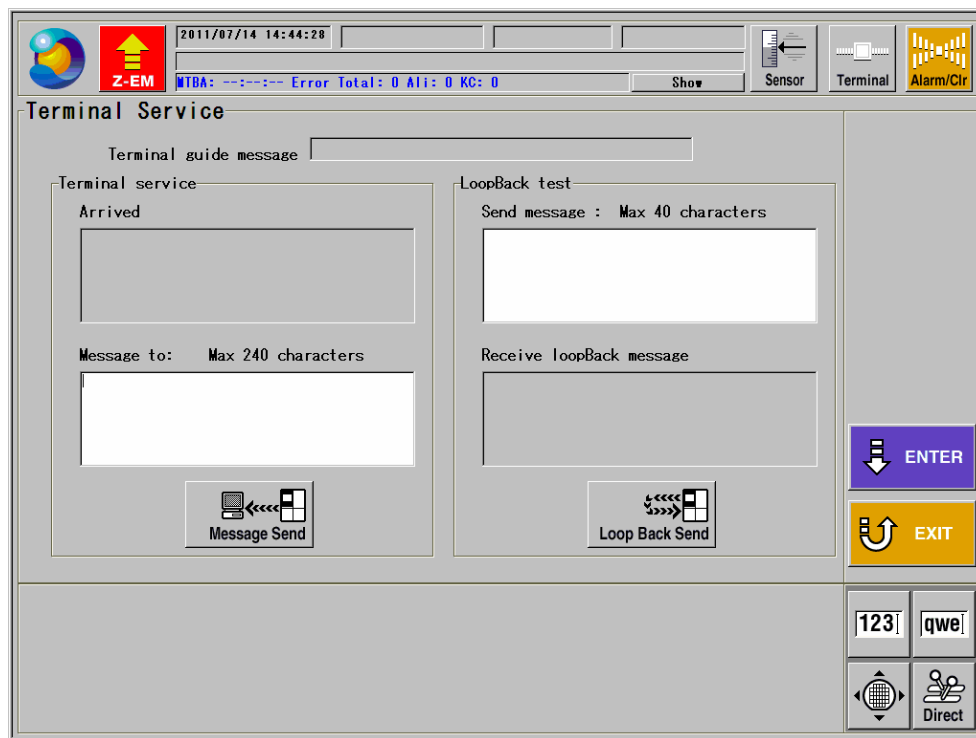
5 – 14. Equipment Terminal Service

Outline

The function sends and receives a text of up to 240 characters (240 bytes) between the host and equipment.

TERMINAL SERVICE screen

The TERMINAL SERVICE screen is displayed when the <Terminal> button on the right upper area of the screen is pressed. When the machine receives a message from the host, the <Terminal> button turns blue.



[Terminal guide message] item

Item	Description
Terminal guide message	Does not work.

[Terminal service] frame

Item	Description
Arrived	Received messages from the host are displayed.
Message to	Set the message contents you want to send to the host.
Message Send	Pressing the button sends the entered message to “Message to.”

[LoopBack test] frame

Item	Description
Send message	Enter a message for a loopback test.
Receive loopback message	Displays the message for a loopback test.
Loop Back Send	Pressing the button sends the entered message displayed at <Receive loopback message>.

5 – 15. Error Message

Outline

The error message function complies with the GEM definition.

5 – 16. Clock

Outline

The clock function complies with the GEM definition.

5 – 17. Spooling

Outline

The procedure for setting the spooling function is described in Section 3-1-5 [SPOOLING Screen].

5 – 18. Control

Outline

The control functions comply with the GEM provisions.

6. SECS-II Message Subset

Summary of this section

This section explains messages supported by the equipment.

Section No.	Title
6-1	Supported Message List
6-2	SECS-II Data List
6-3	Message Details

6 – 1. Supported Message List

Message list

Stream	Function	Message Name	Direction
S1	F0	Abort Transaction	S H<-->E
S1	F1	Are You There Request (R)	S H<-->E, Reply
S1	F2	On-line Data (D)	S H<-->E
S1	F3	Selected Equipment Status Request (SSR)	S H-->E, Reply
S1	F4	Selected Equipment Status Data (SSD)	M H<--E
S1	F11	Status Variable Namelist Request (SVNR)	S H-->E, Reply
S1	F12	Status Variable Namelist Reply (SVNRR)	M H<--E
S1	F13	Establish Communication Request (CR)	S H<-->E, Reply
S1	F14	Establish Communication Request Acknowledge (CRA)	S H<-->E
S1	F15	Request OFF-LINE (ROFL)	S H-->E, Reply
S1	F16	OFF-LINE Acknowledge (OFLA)	S H<--E
S1	F17	Request ON-LINE (RONL)	S H-->E, Reply
S1	F18	ON-LINE Acknowledge (ONLA)	S H<--E
S2	F0	Abort Transaction	S H<-->E
S2	F13	Equipment Constant Request (ECR)	S H-->E, Reply
S2	F14	Equipment Constant Data (ECD)	M H<--E
S2	F15	New Equipment Constant Send (ECS)	S H-->E, Reply
S2	F16	New Equipment Constant Acknowledge (ECA)	S H<--E
S2	F17	Date and Time Request (DTR)	S H<-->E, Reply
S2	F18	Date and Time Data (DTD)	S H<-->E
S2	F23	Trace Initialize Send (TIS)	S H-->E
S2	F24	Trace Initialize Acknowledge (TIA)	S H<--E
S2	F25	Loopback Diagnostic Request (LDR)	S H<-->E, Reply
S2	F26	Loopback Diagnostic Data (LDD)	S H<-->E
S2	F29	Equipment Constant Namelist Request (ECNR)	S H-->E, Reply
S2	F30	Equipment Constant Namelist (ECN)	M H<--E
S2	F31	Date and Time Send (DTS)	S H-->E, Reply
S2	F32	Date and Time Acknowledge (DTA)	S H<--E
S2	F33	Define Report (DR)	M H-->E, Reply
S2	F34	Define-Report Acknowledge (DRA)	S H<--E
S2	F35	Link Event Report (LER)	M H-->E, Reply
S2	F36	Link Event Report Acknowledge (LERA)	S H<--E
S2	F37	Enable/Disable Event Report (EDER)	S H-->E, Reply
S2	F38	Enable/Disable Event Report Acknowledge (EDEA)	S H<--E
S2	F39	Multi-Block Inquire (DMBI)	S H-->E, Reply
S2	F40	Multi-Block Grant (DMBG)	S H<--E
S2	F41	Host Command Send (HCS)	M H-->E, Reply
S2	F42	Host Command Acknowledge (HCA)	S H<--E
S2	F43	Reset Spooling Streams and Functions (RSSF)	S H-->E, Reply
S2	F44	Reset Spooling Acknowledge (RSA)	M H<--E
S2	F45	Define Variable Limit Attributes (DVLA)	M H-->E, Reply
S2	F46	Variable Limit Attribute Acknowledge (VLAA)	M H<--E
S2	F47	Variable Limit Attribute Request (VLAR)	S H-->E, Reply
S2	F48	Variable Limit Attribute Send (VLAS)	M H<--E
S5	F0	Abort Transaction	S H<-->E

Message list (Continued)

Stream	Function	Message Name	Direction
S5	F1	Alarm Report Send (ARS)	S H<--E, Reply
S5	F2	Alarm Report Acknowledge (ARA)	S H-->E
S5	F3	Enable/Disable Alarm Send (EAS)	S H-->E, Reply
S5	F4	Enable/Disable Alarm Acknowledge (EAA)	S H<--E
S5	F5	List Alarms Request (LAR)	S H-->E, Reply
S5	F6	List Alarm Data (LAD)	M H<--E
S6	F0	Abort Transaction	S H<-->E
S6	F1	Trace Data Send (TDS)	S H<--E, Reply
S6	F2	Trace Data Acknowledge (TDA)	S H-->E
S6	F5	Multi-block Data Send Inquire (MBI)	S H<--E, Reply
S6	F6	Multi-block Grant (MBG)	S H-->E
S6	F11	Event Report Send (ERS)	M H<--E, Reply
S6	F12	Event Report Acknowledge (ERA)	S H-->E
S6	F15	Event Report Request (ERR)	S H-->E, Reply
S6	F16	Event Report Data (ERD)	M H<--E
S6	F19	Individual Report Request (IRR)	S H-->E, Reply
S6	F20	Individual Report Data (IRD)	M H<--E
S6	F23	Request Spooled Data (RSD)	S H-->E, Reply
S6	F24	Request Spooled Data Acknowledgement Send (RSDAS)	S H<--E
S7	F0	Abort Transaction	S H<-->E
S7	F1	Process Program Load Inquire (PPI)	S H<-->E, Reply
S7	F2	Process Program Load Grant (PPG)	S H<-->E
S7	F3	Process Program Send (PPS)	M H<-->E, Reply
S7	F4	Process Program Acknowledge (PPA)	S H<-->E
S7	F5	Process Program Request (PPR)	S H<-->E, Reply
S7	F6	Process Program Data (PPD)	M H<-->E
S7	F17	Delete Process Program Send (DPS)	S H-->E, Reply
S7	F18	Delete Process Program Acknowledge (DPA)	S H<--E
S7	F19	Current EPPD Request (RER)	S H-->E, Reply
S7	F20	Current EPPD Data (RED)	M H<--E
S9	F1	Unrecognized Device ID (UDN)	S H<--E
S9	F3	Unrecognized Stream Type (USN)	S H<--E
S9	F5	Unrecognized Function Type (UFN)	S H<--E
S9	F7	Illegal Data (IDN)	S H<--E
S9	F9	Transaction Timer Timeout (TTN)	S H<--E
S9	F13	Conversation Timeout (CTN)	S H<--E
S10	F0	Abort Transaction	S H<-->E
S10	F1	Terminal Request (TRN)	S H<--E, Reply
S10	F2	Terminal Request Acknowledge (TRA)	S H-->E
S10	F3	Terminal Display, Single (VTN)	S H-->E, Reply
S10	F4	Terminal Display, Single Acknowledge (VTA)	S H<--E
S10	F5	Terminal Display, Multi-block (VMN)	M H-->E, Reply
S10	F6	Terminal Display, Multi-block Acknowledge (VMA)	S H<--E
S14	F1	GetAttr Request	S H-->E, Reply
S14	F2	GetATr Data	M H<--E

6 – 2. SECS-II Data List

SECS-II data list of this equipment

Data Item	Description	Format	Length
ABS	Any binary string	Binary	m (*1)
ACKC5	Acknowledge code	Binary	1
ACKC6	Acknowledge code	Binary	1
ACKC7	Acknowledge code	Binary	1
ACKC7A	Acknowledge code	U-Integer	1
ALCD	Alarm code with set/clear	Binary	1
ALED	Alarm enable/disable	Binary	1
ALID	Alarm ID	U-Integer	4
ALTX	Alarm text message	Ascii	40
ATTRDATA	Contains special attribute value for specific object.	All	m (*1)
ATTRID	Attribute identifier for specific type of object	Ascii	m (*1)
ATTRRELN	Defines relation between specific values and the value of object instance attribute.	U-Integer	1
CAACK	Carrier Action Acknowledge Code	U-Integer	1
CARRIERACTION	Specifies the requested for a carrier.	Ascii	m (*1)
CARRIERSPEC	The object specifier for a carrier. Confirm OBJSPEC	Ascii	m (*1)
CATTRDATA	The value of a carrier attribute.	All	m (*1)
CATTRID	The name of a carrier attribute.	Ascii	m (*1)
CCODE	Command code	U-Integer	2
CEED	Collection event enable/disable code	Boolean	1
CEID	Collected event ID	U-Integer	4 (*2)
COMMACK	Communication establish acknowledge code	Binary	1
CPNAME	Command parameter name	Ascii	m (*1)
CPACK	Command acknowledge	Integer	1
CPVAL	Command parameter value	All	m (*1)
DATAID	Data ID	U-Integer	2
DATALLENGTH	Data length	U-Integer	2
DRACK	Define report acknowledge code	Binary	1
DSPER	Data gathering time (hhmmss/hhmmsscc)	Ascii	m (*1)
EAC	Equipment acknowledge code	Binary	1
ECID	Equipment constant ID	U-Integer	2
ECV	Equipment constant value	All	m (*1)
ECDEFS	Equipment constant default value	All	m (*1)
ECMAX	Equipment constant maximum value	All	m (*1)
ECMIN	Equipment constant minimum value	All	m (*1)
ECNAME	Equipment constant name	Ascii	m (*1)
EDID	Expected data ID	All	m (*1)
ERACK	Enable/Disable event report	Binary	1
ERRCODE	Error code	U-Integer	2
ERRTEXT	Error text showing the contents of ERRCODE	Ascii	m (*1)
ERRW7	Text string describing error found in process program	Ascii	m (*1)
FCNID	Function ID	U-Integer	1
GRANT	Grant code	Binary	1
GRANT6	Permission to send	Binary	1
HCACK	Host command parameter acknowledge code	Binary	1

SECS-II data list of this equipment (Continued)

Data Item	Description	Format	Length
LENGTH	Length of the service program or process program	U-Integer	2、4
LIMITACK	Acknowledgement code for variable limit attribute set	U-Integer	1
LIMITID	Limit ID	Binary	1
LIMITMAX	Limit maximum tolerance	All	m (*1)
LIMITMIN	Limit minimum tolerance	All	m (*1)
LINKID	Used to link a completion message with a request that an operation be performed.	U-Integer	4
LOWERDB	A variable limit attribute which defines the lower boundary of the dead band of a limit	All	m (*1)
LRACK	Link report acknowledge code	Binary	1
LVACK	Variable limit definition acknowledge code	Binary	1
MDLN	Equipment model type	Ascii	6
MEXP	Message expected in the form SxxFyy	Ascii	6
MHEAD	SECS message block header associated with message block in error	Binary	10
OBJID	Identifier for an object	Ascii	m (*1)
OBJSPEC	A text string that has an internal format and that is used to point to a specific object instance.	Ascii	m (*1)
OBJTYPE	Identifier for a group or class of object.	Ascii	m (*1)
OFLACK	Acknowledge code for Off-line request	Binary	1
ONLACK	Acknowledge code for On-line request	Binary	1
PARAMNAME	The name of a parameter in a request.	Ascii	m (*1)
PARAMVAL	The value of the parameter named in PARAMNAME.	All	m (*1)
PORTACCESS	The access type to be performed on a port.	Ascii	m (*1)
PORTACTION	The action to be performed on a port.	Ascii	m (*1)
PORTGRPNAME	The identifier of a group of port.	Ascii	m (*1)
PPARM	Process parameter	All	m (*1)
PPBODY	Process program body	Binary	m (*1)
PPGNT	Process program grant status	Binary	1
PPID	Process program ID	Ascii	Max80
PTN	Material Port number.	U-Integer	1
RCMD	Remote command	Ascii	m (*1)
REPGSZ	Reporting group size	U-Integer	2
RPTID	Report ID	U-Integer	2
RSDA	Request spooled data acknowledge	Binary	1
RSDC	Request spool data code	Unteger	1
RSPACK	Reset spooling acknowledge	Binary	1
SEQNUM	Command number	U-Integer	2
SMPLN	Sample number	U-Integer	2
SOFTREV	Software revision code	Ascii	6
STIME	Sample time (YYYYMMDDhhmmsscc or YYMMDDhhmmss)	Ascii	16 or 12
STRACK	Spool stream acknowledge	Binary	1
STRID	Stream ID	U-Integer	1
SV	Status variable value	All	m (*1)
SVNAME	Status variable name	Ascii	m (*1)
SVID	Status variable ID	U-Integer	2
TEXT	A single line of characters	Ascii	m (*1)
TIACK	Equipment acknowledgement code	Binary	1

SECS-II data list of this equipment (Continued)

Data Item	Description	Format	Length
TID	Terminal ID	Binary	1
TIME	YYYYMMDDhhmmsscc or YYMMDDhhmmss	Ascii	16 or 12
TOTSMP	Total samples to be made	U-Integer	2
TRID	Trace request ID	U-Integer	2
UNITS	Units Identifier	Ascii	m (*1)
UPPERDB	Deadband upper limit	All	m (*1)
V	Variable data	All	m (*1)
VID	Variable ID	U-Integer	4 (*2)

Note 1: “m” refers to undefined length.

Note 2: It is always 4 bytes on this equipment.

6 – 3. Message Details

Introduction

The message details are described in SML (SECS Message Language) format.

S1, F0 - Abort Transaction

S, H<->E

Description: Used in lieu of an expected reply to abort a transaction. Function 0 is defined in every stream and has the same meaning in every stream.

Structure: Header only

Message format

S1F0

Header Only

S1, F1 - Are You There Request (R)

S, H<->E, Reply

Description: Confirms whether the equipment is on-line. When there is a replay of function 0, communication cannot be started. After the equipment sent S1F1 to the host, if function 0 is received, this function has the same meaning as replay timeout occurrence.

Structure: Header only

Message format

S1F1 W

Header Only

Description: Data signifying the equipment is on-line

Structure:

L,2

1. <MDLN> A(6)
2. <SOFTREV> A(6)

MDLN and SOFTREV are character string variables as follows:

MDLN:	A(6)	• 6 bytes (Max) of character string
SOFTREV:	A(6)	• 6 bytes (Max) of character string

Exception: The host sends a zero-length list to the equipment.

Message format

S1F2

<L[2]

<A[6] MDLN>

<A[6] SOFTREV>

>

Sending from host

<L[0]

>

Description: This is a request to the equipment to report selected values of its status.

Structure:

```
L,n
  1. <SVID1>      U(2)
  :
  n. <SVIDn>      U(2)
```

Exception: A zero-length list (structure 1) means to report all SVIDs.

Message format

S1F3 W

<L

<U2 SVID>

.....

>

If Element = 0, (Specify all SVIDs)

<L[0]

>

Description: The equipment reports the value of each SVID in the requested order.
The host should remember which SVID is requested.

Structure:

```
L,n
  1. <SV1>          ALL
  :
  n. <SVn>          ALL

SVID values
```

Message format

S1F4

<L

<SV>

.....

>

Description: A request to the equipment to identify certain status variables.

Structure:

```
L,n
  1. <SVID1>          U(2)
  :
  n. <SVIDn>          U(2)
```

Exception: A zero-length list (structure 1) means to report all SVIDs

Message format

S1F11 W

<L

 <U2 SVID>

>

If Element = 0, (Specify all SVIDs)

<L[0]

>

Description: The equipment reports to the host the name and units of the requested status variables.

Structure:

```
L,n
  1. L,3
    1. <SVID1>          U(2)
    2. <SVNAME1>       A(??)
    3. <UNITS1>        A(??)
  2. L,3
    1. <SVID2>          U(2)
    2. <SVNAME2>       A(??)
    3. <UNITS2>        A(??)
    :
    :
  n. L,3
    1. <SVIDn>          U(2)
    2. <SVNAMEn>       A(??)
    3. <UNITSn>        A(??)
```

Message format

S1F12

<L

<L[3]

<U2 SVID>

<A SVNAME>

<A UNITS>

>

...

>

Description: This message provides a means of initializing communications at startup or after a communications break.

Structure:

L,2

1. <MDLN> A(6)
2. <SOFTREV> A(6)

Exception: Host sends a zero-length list.

Message format

S1F13 W

<L[2]

<A[6] MDLN>

<A[6] SOFTREV>

>

Sending from host

<L[0]

>

Description: Accept or deny Establish Communications Request (S1F13). MDLN and SOFTREV are on-line data and are valid only if COMMACK = 0.

Structure:

- L,2
 - 1. <COMMACK> B(1)
 - 2. L,2
 - 1. <MDLN> A(6)
 - 2. <SOFTREV> A(6)

COMMACK: Establish Communications Ack code

- 0 = Accepted
- 1 = Denied, Try again
- 2-63 Reserved

Exception: The host sends a zero-length list for item 2

Message format

S1F14

```
<L[2]
  <B[1] COMMACK>
  <L[2]
    <A[6] MDLN>
    <A[6] SOFTREV>
  >
>
```

Sending from host

S1F14

```
<L[2]
  <B[1] COMMACK>
  <L[0]
>
>
```

S1, F15 - Request OFF-LINE

S, H-->E, Reply

Description: The host requests the equipment for transition to the OFF-LINE state.

Structure: Header only

Message format

S1F15 W

Header Only

Description: Replay of OK or NG to S1, F15

Structure: <OFLACK>

OFLACK: Acknowledge code for off-line request - B(1)

0 = Off-line accepted

1 - 63 Reserved

Message format

S1F16

<B[1] OFLACK>

Description: The host requests the equipment for transition to the ON-LINE state.

Structure: Header only

Message format

S1F17 W

Header Only

Description: Replay of OK or NG to S1, F17

Structur: <ONLACK>

ONLACK: Acknowledge code for on-line request - B(1)

- 0 = On-line accepted
- 1 = Denied
- 2 = Equipment is On-line already
- 3 - 63 Reserved

Message format

S1F18

<B[1] ONLACK>

S2, F0 - Abort Transaction

S, H<->E

Description: Used in lieu of a valid secondary message to abort a transaction. Function 0 is defined in every stream and has the same meaning in every stream.

Structure: Header only

Message format

S2F0

Header Only

Description: Constants such as for calibration that are changed frequently can be obtained using this message.

Structure:

L,n
1. <ECID1> U(2)
:
n. <ECIDn>

ECID: Equipment Constant ID

Exception: The zero-length list or item means to report all ECVs according to a predefined order.

Message format

S2F13 W

<L

<U2 ECID>

.....

>

If Element = 0, (Specify all ECIDs.)

<L[0]

>

Description: Data response to S2, F13 in the requested order.

Structure:

L,n
1. <ECV1> ALL
:
n. <ECVn> ALL

ECV: Equipment Constant Value

Message format

S2F14

<L

<ECV>

.....

>

Description: Change equipment constants.

Structure:

```
L,n
  1. L,2
      1. <ECID1>    U(2)
      2. <ECV1>    ALL
  2. L,2
  :
  n. L,2
      1. <ECIDn>    U(2)
      2. <ECVn>    ALL
```

Message format

S2F15 W

<L

<L[2]

<U2 ECID>

<ECV>

>

...

>

NOTICE

The data changed using this command is cleared after the machine is restarted.

Description: Acknowledge or error. If EAC contains a non-zero error code, the equipment should not change any of the ECIDs specified in S2F15.

Structure: <EAC>

EAC: Equipment acknowledge code - B(1)

- 0 = Accepted
- 1 = Denied. No constant exists.
- 2 = Denied. Busy (Equipment process state is IN PROCESS or SETUP.)
- 3 = Denied. There are constants of out of range.
- >3 = Other equipment-specific error
- 4 - 63 Reserved

Message format

S2F16

<B[1] EAC>

S2, F17 - Date and Time Request

S, H<->E, Reply

Description: Useful to check equipment time base or for equipment to synchronize with the host time base

Structure: Header Only

Message format

S2F17 W

Header Only

Description: Actual time data

Structure: <TIME> A(16) or A(12)

Time: When Time Format = 0, YYMMDDhhmmss
 = 1, YYYYMMDDhhmmsscc

Message format

S2F18

<A[16 or 12] TIME>

Description: Status variables exist at all times. This function provides a way to sample a subset of hose status variables as a function of time. The trace data is returned on S6, F1 and is replaced to the origin request by the TRID. Multiple trace requests may be made to that equipment allowing it. If equipment receives S2, F23 with the same TRID as a trace function that is currently in progress, the equipment should terminate the old trace and then initiate the new trace. A trace function currently in progress may be terminated by S2, F23 with TRID of that trace and TOTSMP = 0

This equipment supports HHMMSS. It does not support HHMMSSCC.

Structure: The following structures are approved for item formats. They should be used by all new implementations.

L,5

1. <TRID>
2. <DSPER>
3. <TOTSMP>
4. <REPGSZ>
5. L,n
 - 1.<SVID1>
 - :
 - n.<SVIDn>



Message format

S2F23 W

<L[5]

<U2 TRID>
 <A[6] DSPER>
 <U2 TOTSMP>
 <U2 REPGSZ>
 <L
 <U2 SVID>

...

>

>

Description: Replay of OK or NG to S2F23

Structure: <TIAACK>

TIAACK: Acknowledge code for trace initialize set - B(1)

- 0 = Accepted
- 1 = Denied. Too much state variable IDs (SVID).
- 2 = Denied. No more trace available.
- 3 = Denied. Invalid trace intervals.
- 4 = Denied. Invalid SVID.
- 5 - 63 = Reserved

Message format

S2F24

<B[1] TIAACK>

S2, F25 - Loopback Diagnostic Request

S, H<-->E, Reply

Description: Diagnostic message for checkout of protocol and communication circuits. The binary string is echoed back.

Structure: <ABS> B(?)

Message format

S2F25 W

<ABS>

S2, F26 - Loopback Diagnostic Data

S, H<-->E

Description: The echoed back binary string received in S2F25

Structure: <ABS> B(?)

Message format

S2F26

<ABS>

Description: This function allows the host to retrieve basic information about equipment constants that are available in the equipment.

Structure:

```
L,n
  1. <ECID1>    U(2)
  :
  n. <ECIDn>    U(2)
```

Exception: A zero-length list (structure 1) means send information for all ECIDs.

Message format

S2F29 W

<L

<U2 ECID>

.....

>

If Element = 0, (Specify all ECIDs.)

<L[0]

>

Description: The equipment reports the requested information, such as equipment constant name list, unit, etc.

Structure:

L,n

1. L,6

1. <ECID1>	U(2)
2. <ECNAME1>	A(??)
3. <ECMIN1>	ALL
4. <ECMAX1>	ALL
5. <ECDEF1>	ALL
6. <UNITS1>	A(??)

2. L,6

1. <ECID2>	U(2)
2. <ECNAME2>	A(??)
3. <ECMIN2>	ALL
4. <ECMAX2>	ALL
5. <ECDEF2>	ALL
6. <UNITS2>	A(??)

:
:
:

n. L,6

1. <ECIDn>	U(2)
2. <ECNAMEn>	A(??)
3. <ECMINn>	ALL
4. <ECMAXn>	ALL
5. <ECDEFn>	ALL
6. <UNITSn>	A(??)

Message format

S2F30

<L

<L[6]

<U2 ECID>

<A ECNAME>

<ECMIN>

<ECMAX>

<ECDEF>

<A UNITS>

>

...

>

Description: Useful to synchronize the equipment time with the host time base.

Structure: <TIME> A(16) or A(12)

Time Format: Format when Time Format = 0, YYMMDDhhmmss
= 1, YYYYMMDDhhmmsscc

Message format

S2F31 W

<A[16 or 12] TIME>

Description: Acknowledge receipt of the time and date.

Structure: <TIACK>

TIACK: Time Acknowledge code - B(1)

0 = OK

1 = Error (not received)

2 - 63 = Reserved

Message format

S2F32

<B[1] TIACK>

Description: Define a group of reports for the equipment.

Structure:

```

L,2
  1. <DATAID>    U(2)
  2. L,a
    1. L,2
      1. <RPTID1>    U(2)
      2. L,b
        1. <VID1>    U(2)
        :
        b. <VIDb>
      :
    a.L,2
      1. <RPTIDa>
      2. L,c
        1. <VID1>
        :
        c. <VIDc>

```

Exception: 1. A zero-length list following the DATA ID deletes all report definitions and associated links.
 2. A zero-length list following a RPTID deletes report, and all CEID links to that report.

Message format

S2F33 W

```

<L[2]
  <U2 DATAID>
  <L
    <L[2]
      <U2 RPTID>
      <L
        <U2 VID>
        ...
      >
    >
  ...
>

```

Description: Acknowledge or error. If an error condition is detected, the entire message is rejected.

Structure: <DRACK> B(1)

DRACK: Define Report Ack code.

- 0 = Accepted
- 1 = Denied. Insufficient space
- 2 = Denied. Invalid format
- 3 = Denied. At least one RPTID already defined
- 4 = Denied. There is no VID exist
- >4 = Other errors
- 5 - 63 = Reserved

Message format

S2F34

<B[1] DRACK>

Description: The purpose of this message for the host is to link plural reports to an event (CEID).

Default of these linked event reports became disabled. That is, the occurrence of an event would not cause the report to be sent until enabled.

Structure:

```

L,2
  1. <DATAID>          U(2)
  2. L,a
    1. L,2
      1. <CEID1>        U(4)
      2. L,b
        1. <RPTID1>     U(2)
        :
        b. <RPTIDb>
      :
    a. L,2
      1. <CEIDa>
      2. L,c
        1. <RPTID1>
        :
        c. <RPTIDc>

```

Exception: All report links to that event following <CEID> will be deleted in a list of zero length

Message format

S2F35 W

<L[2]

<U2 DATAID>

<L

<L[2]

<U4 CEID>

<L

<U2 RPTID>

...

>

>

...

>

>

Description: Link event report acknowledge or error. If an error condition is detected, the entire message is rejected.

Structure: <LRACK> B(1)

LRACK: Link Report Ack code

- 0 = Accepted
- 1 = Denied. Insufficient space
- 2 = Denied. Invalid format
- 3 = Denied. At least one CEID link already defined
- 4 = Denied. No CEID exists.
- 5 = Denied. No RPTID exists.
- >5 = Other errors
- 6-63 = Reserved

Message format

S2F36

<B[1] LRACK>

Description: The purpose of this message for the host is to enable or disable reporting for a group of events (CEIDs).

Structure:

- L,2
 - 1. <CEED> Boolean(1)
 - 2. L,n #CEIDs
 - 1. <CEID1> U(4)
 - :
 - n. <CEIDn> U(4)

CEED: 0 = Disable event report
 1 = Enable event report

Exception: A list of zero length following <CEED> means all CEIDs.

Message format

S2F37 W

<L[2]

 <BOOLEAN CEED>

 <L

 <U4 CEID>

 ...

 >

>

Description: Acknowledge of enable/disable event reporter error. If an error condition is detected, the entire message is rejected.

Structure: <ERACK>

ERACK: Enable/Disable Event Report Ack code - B(1)

- 0 = Accepted
- 1 = Denied. No CEID exists.
- <1 = Other errors
- 2-64 = Reserved

Message format

S2F38

<B[1] ERACK>

Description: If a S2F33, S2F35 or S2F45 message is more than one block, this transaction must precede the message.

Structure:

L,2

- | | |
|-----------------|------|
| 1. <DATAID> | U(2) |
| 2. <DATALENGTH> | U(4) |

Message format

S2F39 W

<L[2]

<U2 DATAID>

<U4 DATALENGTH>

>

Description: Grant permission to send multi-block message.

Structure: <GRANT> B(1)

GRANT: Grant code

- 0 = Positive response, load OK
- 1 = Busy, try again
- 2 = No space
- 3 = Duplicate name
- >3 = Equipment specific error code
- 4-63 = Reserved

Message format

S2F40

<B[1] GRANT>

Description: Host requests for the equipment to perform specified remote command with the associated parameters.

Structure:

```

L,2
  1.<RCMD>          A(??)
  2.L,n
    1.L,2
      1.<CPNAME1>    A(??)
      2.<CPVAL1>     ALL
    :
    n.L,2
      1.<CPNAMEn>    A(??)
      2.<CPVALn>     ALL

```

RCMD	Description
START_S	Single device full automation process stop
START_M	Multi device full automation process stop
PP_SELECT_S	Single device process program selection
PP_SELECT_M	Multi device process program selection
STOP	Full Automation Stop
PAUSE	Full Automation Pause
RESUME	Full Automation Resume
PAUSE_H	Full Automation Pause (host control)
RESUME_H	Full Automation Resume (host control)
ABORT	Forced system initialization
EMERGENCY	Z-EM
NEW	New cassette setting
I	System initialization
INIT_S	Single device full automation initialization processing
INIT_M	Multi device full automation initialization processing
CLEAR	Unloading of all the wafers
1	Alignment re-execution (error recovery)
2	Alignment stop (error recovery)
3	Kerf check re-execution (error recovery)
4	Kerf check stop (error recovery)
5	Wafer loading stop
6	Wafer loading restart
7	Precut ON
PP_START_S	"PP_SELECT_S","NEW" ,"INIT_S" ,"START_S" command execution by one operation
PP_START_M	"PP_SELECT_M","NEW" ,"INIT_M" ,"START_M" command execution by one operation
GO_LOCAL	LOCAL state transition
GO_REMOTE	REMOTE state transition
RECOVERY	Error Recovery Screen Display

S2, F41 - Host Command Send (Continued)

Message format

S2F41 W

<L[2]

<A[?] RCMD>

<L[?]

<L[2]

<A CPNAME>

<CPVAL>

>

...

>

>

S2F41 –"PP_SELECT_S" , "PP_START_S"

S2F41 W

<L[2]

<A[11] "PP_SELECT_S"> :PP_SELECT_S

<L[2]

<L[2]

<A "Port">

<B[1] Port> :Port Number

1 = Port#1

2 = Port#2 (Not Used)

>

<L[2]

<A "DEV_NO">

<A PPID> :RecipeName MAX 80Bytes

>

>

>

S2F41 –"PP_SELECT_M" , "PP_START_M"

S2F41 W

```

<L[2]
  <A[11] "PP_SELECT_M">
  <L[m]                : m = Number of Recipe * 2 + 1
    <L[2]
      <A "Port">
      <B[1] Port>      :Port Number
                        1 = Port#1
                        2 = Port#2 (Not Used)
    >
    <L[2]
      <A "M_DEVNO[0]">
      <A PPID1>        :1 RecipeName MAX 80Bytes
    >
    <L[2]
      <A "PCE_NO[0]">
      <U1 PCE_NO1>     :1 Number of Piece
    >
    <L[2]
      <A "M_DEV_NO[1]">
      <A PPID2>        :2 RecipeName MAX 80Bytes
    >
    <L[2]
      <A "PCE_NO[1]">
      <U1 PCE_NO2>     :2 Number of Piece
    >
    :
    :
    <L[2]
      <A "M_DEV_NO[n-1]">
      <A PPIDn>        :n RecipeName MAX 80Bytes
    >
    <L[2]
      <A "PCE_NO[n-1]">
      <U1 PCE_NO n>    :n Number of Piece
    >
  >
>

```


S2, F41 - Host Command Send (Continued)

S2F41 –"START_S", "START_M"

When PPID is selected already in "PP-SELECT_S" or "PP-SELECT_M", only port number is provided as a parameter.

S2F41 W

```
<L[2]
  <A[7] "START_S">      :START_S / START_M
  <L[1]
    <L[2]
      <A "Port">
      <B[1] Port>      :Port Number
                        1 = Port#1
                        2 = Port#2 (Not Used)
    >
  >
>
```

S2F41 – Other Command

S2F41 W

```
<L[2]
  <A[??] >      :RCMD
  <L[0]
>
```

Description: Acknowledge or error response to host command request.

Structure:

```

L,2
  1.<HACK>          B(1)
  2.L,n
    1.L,2
      1.<CPNAME1>    A(??)
      2.<CPACK1>     I(1)
    :
    :
    n.L,2
      1.<CPNAMEn>    A(??)
      2.<CPACKn>     I(1)

```

HACK: 0 = Acknowledge, command has been performed
 1 = Command does not exist
 2 = Cannot perform now
 3 = At least one parameter is invalid
 4 = Acknowledge, command will be performed with completion signaled later by an event
 5-63 = Reserved
 64 = Reserved
 CPACK: 1 = Parameter name (CPNAME) does not exist
 2 = Illegal value specified for CPVAL
 3 = Illegal format specified for CPVAL
 >3 = Other equipment-specific error
 4-63 = Reserved

Exception: If there are no invalid parameters, a list of zero length will be sent for item 2.

Message format

S2F42

```

<L[2]
  <B[1] HACK>
  <L
    <L[2]
      <A CPNAME>
      <I1 CPACK>
    >
  ...
  >
>

```

Description: This message allows the host to select specific streams and functions to be spooled whenever spooling is active.

Structure:

```

L,m
  1. L,2
    1. <STRID1>      U(1)
    2. L,n
      1. <FCNID1>    U(1)
      :
      :
      n. <FCNIDn>    U(1)
  :
  m. L,2
    1. <STRIDm>      U(1)
    2. L,n
      1. <FCNID1>    U(1)
      :
      :
      n. <FCNIDn>    U(1)

```

Exceptions:

1. For zero-length list, m = 0, turns off spooling for all streams and functions.
2. For zero-length list, n = 0, turns on spooling for all functions for the associated stream.

Message format

S2F43 W

<L

<L[2]

<U1 STRID>

<L

<U1 FCNID>

...

>

>

...

>

Description: Acknowledge or error response to spooling stream, function setting

Structure:

```

L,2
  1. <RSPACK>          B(1)
  2. L,m
    1. L,3
      1. <STRID1>      U(1)
      2. <STRACK1>    B(1)
      3. L,n
        1. <FCNID1>   U(1)
        :
        :
        n. <FCNIDn>   U(1)
      :
    m. L,3
      1. <STRID1>      U(1)
      2. <STRACK1>    B(1)
      3. L,n
        1. <FCNID1>   U(1)
        :
        :
        n. <FCNIDn>   U(1)

```

Exceptions: If RSACK = 0, a zero-length list and m = 0 is given, indicating no streams or functions in error. A zero-length list, and n = 0, indicates no functions in error for specified stream.

RSPACK: Spool Data Set Ack code

0 = Spooling set accepted
 1 = Denied.
 2-63 = Reserved

STRACK: Spool Stream Ack code

1 = Spooling is not available for this stream (stream 1).
 2 = Unknown stream
 3 = Unknown function specified for this stream
 4 = Secondary message assigned for this stream will not be spooled.
 5-63 = Reserved

S2, F44 - Reset Spooling Acknowledge (Continued)

Message format

S2F44

<L[2]

 <B[1] RSPACK>

 <L

 <L[3]

 <U1 STRID>

 <B[1] STRACK>

 <L

 <U1 FCNID>

 ...

 >

 >

 ...

 >

>

Structure: L, 2

- L,2
 - 1. <DATAID>
 - 2. L,m (m = # of variables in this definition)
 - 1. L, 2
 - 1. <VID1>
 - 2. L, n (n = # of limits being defined/changed for VID1)
 - 1. L,2
 - 1. <LIMITID1>
 - 2. L,p (p = 0 or 2)
 - 1. <UPPERDB1>
 - 2. <LOWERDB1>
 - :
 - :
 - n. L,2
 - 1. <LIMITID1>
 - 2. L,p (p = 0 or 2)
 - 1. <UPPERDB1>
 - 2. <LOWERDB1>
 - :
 - :
 - m. L, 2
 - 1. <VID1>
 - 2. L, n (n = # of limits being defined/changed for VID1)
 - 1. L,2
 - 1. <LIMITID1>
 - 2. L,p (p = 0 or 2)
 - 1. <UPPERDB1>
 - 2. <LOWERDB1>
 - :
 - n. L,2
 - 1. <LIMITID1>
 - 2. L,p (p = 0 or 2)
 - 1. <UPPERDB1>
 - 2. <LOWERDB1>

Exceptions: 1. A zero-length list and m = 0 set all limit values for all monitored VIDs to "undefined."
 2. "Zero-length list" and "n = 0" set all limit values for that VID to "undefined."
 3. "Zero-length list" and "p = 0" set that limit to "undefined."

Message format

S2F45 W

<L[2]

<U2 DATAID>

<L

<L[2]

<U2 VID>

<L

<L[2]

<B[1] LIMITID>

<L[2]

<UPPERDB>

<LOWERDB>

>

>

...

>

>

...

>

>

Description: Acknowledge definition of variable limit attributes or report error. If DVLA is not accepted due to one or more invalid parameters (e.g., LIMITACK = 3), then a list of invalid parameters is returned containing the variable limit attribute and reason for rejection. If an error condition is detected, the entire message is rejected, i.e., partial changes are not allowed.

Structure:

- L,2
 - 1. <LVAACK>
 - 2. L,m (m = # of invalid parameters)
 - 1. L,3
 - 1. <VID1> (VID with error)
 - 2. <LVACK1>
 - 3. L,n (n = 0 or 2)
 - 1. <LIMITID1> (1st limit in error for VIDp)
 - 2. <LIMITACK1> (reason)
 - :
 - :
 - m. L,3
 - 1. <VIDm> (VID with error)
 - 2. <LVACKm>
 - 3. L,n (n = 0 or 2)
 - 1. <LIMITIDm> (1st limit in error for VIDx)
 - 2. <LIMITACKm> (reason)

Exceptions: 1. "Zero-length list" and "m = 0" indicate no invalid variable limit attributes.
 2. "Zero-length list" and "n = 0" indicate no invalid limit values for that VID.

VLAACK: 0 = Acknowledge, command has been performed.
 1 = Limit attribute definition error
 2 = Cannot perform now
 >2 = Other equipment errors
 3-63 Reserved

LVACK: 1 = Variable does not exist.
 2 = Variable does not have limit value.
 3 = Variable does not have limit value.
 4 = Limit value error as described in LIMITACK
 5 = Number of the specified variables is over the limit
 6-63 Reserved

LIMITACK: 1 = LIMITID does not exist
 2 = UPPERDB>LIMITMAX
 3 = LOWERDB<LIMITMIN
 4 = UPPERDB<LOWERDB
 5 = Incorrect format for UPPERDB and LOWERDB
 6 = Cannot interpret as a numeric value because of ASCII value
 7 = Limit definition for this variable is duplicated
 8 = Number of the specified Limit ID is over the limit
 >8 = Other equipment error
 9-63 Reserved

S2,F46 - Variable Limit Attribute Acknowledge (Continued)

Exceptions: 1. "Zero-length list" and "m = 0" indicates there is no invalid variable limit attribute.
2. "Zero-length list" and "n = 0" indicate there is no invalid variable limit attribute for the VID.

Message format

S2F46

```
<L[2]
  <B[1] LVAACK>
  <L
    <L[3]
      <U2 VID>
      <B[1] LVACK>
      <L
        <B[1] LIMITID>
        <B[1] LIMITACK>
        ...
      >
    >
  >
  ...
>
```

Description: This message allows the host to query the equipment for current variable limit attribute definitions.

Structure:

L,m (m = # of VIDs in this request)
1. <VID1>
:
:
m. <VIDm>

Exceptions: "Zero-length list" and "m = 0" request a list of all VID values that can have variable limit attributes.

Message format

S2F47 W

<L

<U2 VID>

...

>

Description: Equipment sends values of requested variable limit attribute definitions in the order requested.

Structure:

```

L,m (m = # of VIDs this request)
  1. L,2
    1. <VID1>
    2. L,p (p = 0 or 4)
      1. <UNITS1>
      2. <LIMITMIN1>
      3. <LIMITMAX1>
    4. L,n (n = # of limits defined for this VID)
      1. L,3
        1. <LIMITID1>
        2. <UPPERDB1>
        3. <LOWERDB1>
      :
      n. L,3
        1. <LIMITIDn>
        2. <UPPERDBn>
        3. <LOWERDBn>
  :
  m. L,2
    1. <VIDm>
    2. L,p (p = 0 or 4)
      1. <UNITSm>
      2. <LIMITMINm>
      3. <LIMITMAXm>
    4. L,n (n = # of limits defined for this VID)
      1. L,3
        1. <LIMITIDm>
        2. <UPPERDBm>
        3. <LOWERDBm>
      :
      n. L,3
        1. <LIMITIDn>
        2. <UPPERDBn>
        3. <LOWERDBn>

```

Exceptions: 1. "Zero-length list" and "p = 0" indicate that limits are not supported for the VID.
 2. "Zero-length list" and "n = 0" means no limits are currently defined for the specified variable.

Message format

S2F48

```
<L
  <L[2]
    <U2 VID>
    <L
      <A UNITS>
      <LIMITMIN>
      <LIMITMAX>
      <L
        <L[3]
          <B[1] LIMITID>
          <UPPERDB>
          <LOWERDB>
        >
      >
    >
  >
>
```

S5, F0 - Abort Transaction

S, H<->E

Description: Used in lieu of an expected reply to abort a transaction. Function 0 is defined in every stream and has the same meaning in every stream.

Structure: Header only

Message format

S5F0

Header Only

Description: This message reports presence or cancel of an alarm condition.

Structure:

L,3

- | | |
|-----------|-------|
| 1. <ALCD> | B(1) |
| 2. <ALID> | U(4) |
| 3. <ALTX> | A(40) |

ALCD: If bit 8 is 1, alarm set. If bit 8 is 0, alarm clear.

ALID: Alarm code, 4 bytes

ALTX: Alarm text/message

Message format

S5F1 W

<L[3]

<B[1] ALCD>

<U4 ALID>

<A[40] ALTX>

>

Description: Alarm acknowledge or error response

Structure: <ACKC5> Ack Code B(1)

 ACKC5: 0 = Accepted
 >0 = Error, not accepted
 1-63 = Reserved

Message format

S5F2

<B[1] ACK5>

Description: This message changes the state of the effective bit of the alarm notification in the equipment.

Structure:

L, 2

- | | | |
|-----------|----------------------|------|
| 1. <ALED> | Alarm enable/disable | B(1) |
| 2. <ALID> | Alarm ID | U(4) |

ALED: Bit8 = 1 (This means enabling an alarm.)

Bit8 = 0 (This means disabling an alarm.)

Exceptions: Zero-length item for <ALID> means setting/resetting of all alarms.

Message format

S5F3 W

<L[2]

<B[1] ALED>

<U4 ALID>

>

For setting/resetting all alarms

S5F3 W

<L[2]

<B[1] ALED>

<U4 >

>

Description: Acknowledge or error.

Structure: <ACKC5> Ack Code B(1)

ACKC5: 0 = Accepted
 >0 = Error, not accepted
 1-63 = Reserved
 64 = ALID does not exist

Message format

S5F4

<B[1] ACK5>

S5, F5 - List Alarms Request (LAR)

S, H-->E, Reply

Description: This message requests the equipment to send alarm information to the host.

Structure: <ALID1,---,ALIDn> Alarm ID U(4) x n

Exception: A zero-length item means send all possible alarms regardless of the state of ALED.

Message format

S5F5 W

<U4 ALID ...>

Description: Send alarm list data.

Structure:

L,m			
1. L,3	1. <ALCD1>	Alarm code byte	B(1)
	2. <ALID1>	Alarm ID	U(4)
	3. <ALTX1>	Alarm Text	A(40)
2. L,3			
:			
:			
m. L,3	1. <ALCDm>	Alarm code byte	B(1)
	2. <ALIDm>	Alarm ID	U(4)
	3. <ALTXm>	Alarm Text	A(40)

Exception: If m = 0, no response can be mode. A zero length item returned for ALCDi or ALTXi means that value does not exist.

Message format

S5F6

<L

<L[3]

<B[1] ALCD>

<U4 ALID>

<A[40] ALTX>

>

...

>

S6, F0 - Abort Transaction

S, H<->E

Description: Used in lieu of an expected reply to abort a transaction. Function 0 is defined in every stream and has the same meaning in every stream.

Structure: Header only

Message format

S6F0

Header Only

Description: This function sends samples to the host according to the trace setup done by S2, F23. Trace is a time-driven form of equipment status.

Structure:

- L,4
 - 1. <TRID>
 - 2. <SMPLN>
 - 3. <STIME>
 - 4. L,n
 - 1. <SV1>
 - 2. <SV2>
 - :
 - :
 - n. <SVn>

Exception: A zero-length <STIME> means no value is given and that the time is to be derived from <SMPLN> along with knowledge of the request.

Message format

S6F1 W

<L[4]

<U2 TRID>
<U2 SMPLN>
<A[16 or 12] STIME>
<L
 <SV>

....

>

>

S6, F2 - Trace Data Acknowledge (TDA)

S, H-->E

Description: Acknowledge or error of S6, F1.

Structure: <ACKC6> Acknowledge Code B(1)

ACKC6: 0 = Accepted
 >0 = Error, not accepted
 1-63 = Reserved

Message format

S6F2

<B[1] ACKC6>

S6, F5 - Multi-block Data Send Inquire (MBI)

S, H<--E,Reply

Description: If the discrete data report involve more than one block, this transaction must precede the transmission.

Structure:

L,2

- | | | |
|-----------------|-------------|------|
| 1. <DATAID> | Data ID | U(2) |
| 2. <DATALENGTH> | Data length | U(4) |

Message format

S6F5 W

<L[2]

<U2 DATAID>

<U4 DATALENGTH>

>

Description: Allow multi-block transmission or not.

Structure: <GRANT6> Grant permission to send B(1)

GRANT6: 0 = Accepted
 1 = Busy, try again
 2 = No space
 3 = No use
 >3 = Other error
 3-63 Reserved

Message format

S6F6

<B[1] GRANT6>

Description: This message is for the equipment to send a defined reports to the host upon the occurrence of equipment status.

Structure:

L,3			
1. <DATAID>	Data ID	U(2)	
2. <CEID>	Collection event ID	U(4)	
3. L,a			
1. L,2			
1. <RPTID1>	Report ID	U(2)	
2. L,b			
1.<V1>	Value	ALL	
:			
b.<Vb>	Value	ALL	
:			
a. L,2			
1. <RPTIDa>	Report ID	U(2)	
2. L,c # Vs this report			
1.<V1>	Value	ALL	
:			
c.<Vc>	Value	ALL	

Exception: If there are no reports linked to the event, a “null” report is assumed. A zero length list for # of reports means there are no reports linked to the given CEID.

Message format

S6F11 W

<L[3]

<U2 DATAID>

<U4 CEID>

<L

<L[2]

<U2 RPTID>

<L

<V>

...

>

>

...

>

>

Description: Acknowledge or error

Structure: <ACKC6> Ack Code B(1)
 ACKC6: 0 = Accepted
 >0 = Error, not accepted
 1-63 Reserved

Message format

S6F12

<B[1] ACKC6>

S6, F15 - Event Report Request (ERR)

S, H-->E, Reply

Description: The purpose of this message is for the host to demand a given report group from the equipment.

Structure: <CEID> Collection event ID U(4)

Message format

S6F15 W

<U 4 CEID>

Description: Equipment sends reports linked to given CEID to the host.

Structure:

L,3			
1. <DATAID>	Data ID	U(2)	
2. <CEID>	Collection event ID	U(4)	
3. L,a			
1. L,2			
1. <RPTID1>	Report ID	U(2)	
2. L,b			
1. <V1>	Value	ALL	
:			
b. <Vb>	Value	ALL	
:			
a. L,2			
1. <RPTIDa>	Report ID	U(2)	
2. L,c # Vs this report			
1. <V1>	Value	ALL	
:			
c. <Vc>	Value	ALL	

Exception: If there are no reports linked to the event, a "null" report is assumed.

A zero length list for # of reports means there are no reports linked to the given CEID.

Message format

S6F16

<L[3]

<U2 DATAID>

<U4 CEID>

<L

<L[2]

<U2 RPTID>

<L

<V>

...

>

>

...

>

>

S6, F19 - Individual Report Request (IRR)

S, H-->E, Reply

Description: The purpose of this message is for the host to request a defined report from the equipment.

Structure: <RPTID> ReportID U(2)

Message format

S6F19 W

<U2 RPTID>

Description: Equipment sends variable data defined for the given RPTID to the host.

Structure:

L,n	
1. <V1>	ALL
:	
n. <Vn>	ALL

V values

Exception: A zero length list means RPTID is not defined.

Message format

S6F20

<L

<V>

...

>

S6,F23 - Request Spooled Data (RSD)

S, H-->E, Reply

Description: The purpose of this message is for the host to request transmission or deletion of the messages currently spooled by the equipment.

Structure: <RSDC> Spool Data Request code U(1)

RSDC: 0 = Spooled messages transmission
 1 = Spooled messages deletion
 2-63 Reserved

Message format

S6F23 W

<U1 RSDC>

S6, F24 - Request Spooled Data Acknowledgement Send (RSDAS)

S, H<--E

Description: The purpose of this message is to acknowledge the receipt of the Requested Spooled Data and to respond with an appropriate acknowledge code.

Structure: <RSDA> B(1)

RSDA: 0 = OK
 1 = Denied, busy, try again
 2 = Denied, no spool data exists
 3-63 Reserved

Message format

S6F24

<B[1] RSDA>

S7, F0 - Abort Transaction

S, H<->E

Description: Used in lieu of an expected reply to abort a transaction. Function 0 is defined in every stream and has the same meaning in every stream.

Structure: Header only

Message format

S7F0

Header Only

S7, F1 - Process Program Load Inquire (PPI)

S, H<->E,Reply

Description: This message is used to initiate the transfer of a process program or disk file.

Structure:

L,2

- | | | | |
|-------------|--------------------|-------|-------|
| 1. <PPID> | Process program ID | A(??) | MAX80 |
| 2. <LENGTH> | Length | U(4) | |

PPID: Recipe name

LENGTH: Process program length

Message format

S7F1 W

<L[2]

<A PPID>

<U4 LENGTH>

>

Description: This message gives permission for the process program to be loaded.

Structure: <PPGNT> Process program grant status B(1)

PPGNT: 0 = OK
 1 = Load already
 2 = No space
 3 = Invalid PPID
 4 = Busy, try again
 5 = Denied
 >5 = Other error
 6-64 Reserved

Message format

S7F2

<B[1] PPGNT>

Description: Process program send

Structure:

L,2

- | | | | |
|-------------|----------------------|-------|-------|
| 1. <PPID> | Process program ID | A(??) | MAX80 |
| 2. <PPBODY> | Process program body | B(n) | |

PPID: Recipe name

PPBODY: Process program body

Message format

S7F3 W

<L[2]

<A PPID>

<B PPBODY>

>

Description: Acknowledge or error

Structure: <ACKC7> Ack Code B(1)

ACKC7:	0 =	Accepted
	1 =	Denied
	2 =	Length error
	3 =	Reserved
	4 =	PPID not found
	5 =	Mode unsupported
	>5 =	Other error
	6-64	Reserved

Message format

S7F4

<B[1] ACKC7>

S7, F5 - Process Program Request (PPR)

S, H<-->E,Reply

Description: This message is used to request the transfer of a process program.

Structure: <PPID> Process program ID A(??) MAX80

PPID: Recipe name

Message format

S7F5 W

<A PPID>

Description: This message is used to transfer a process program.

Structure:

L,2

- | | | | |
|-------------|----------------------|-------|-------|
| 1. <PPID> | Process program ID | A(??) | MAX80 |
| 2. <PPBODY> | Process program body | B(n) | |

PPID: Revipec name

PPBODY: Process program body

Message format

S7F6

<L[2]

<A PPID>

<B PPBODY>

>

S7, F17 - Delete Process Program Send (DPS)

S, H-->E, Reply

Description: This message is used by the host to request that the equipment delete process programs.

Structure:

L,n				
1.	<PPID1>	Process program ID	A(??)	MAX80
:				
n.	<PPIDn>	Process program ID	A(??)	MAX80

PPID: Recipe name

Exception: If n = 0, delete all the process programs.

Message format

S7F17 W

<L

<A PPID>

...

>

Description: Acknowledge or error.

Structure: <ACKC7> Acknowledge code B(1)

ACKC7:	0 =	Accepted
	1 =	Denied
	2 =	Length error
	3 =	Reserved
	4 =	PPID is not found
	5 =	Mode is unsupported
	>5 =	Other error
	6-64	Reserved

Message format

S7F18

<B[1] ACKC7>

S7, F19 - Current EPPD Request (RER)

S, H-->E, Reply

Description: The host requests the equipment to send a recipe name.

Structure: Header only

Message format

S7F19 W

Header Only

Description: This message is used to transmit the list of process program ID = PPID.

Structure:

L,n				
1.<PPID1>	Process program ID	A(??)	MAX80	
:				
n.<PPIDn>	Process program ID	A(??)	MAX80	

PPID: Recipe name

Exception: The equipment sends a zero-length list for no device list to the host.

Message format

S7F20

<L

<A PPID>

...

>

S9, F1 - Unrecognized Device ID (UDN)

S, H<--E

Description: The device ID in the message block header did not correspond to any known device ID in the node detecting the error.

Structure: <MHEAD> Message Block Header B(10)

Message format

S9F1

<B[10] MHEAD>

S9, F3 - Unrecognized Stream Type (USN)

S, H<--E

Description: The equipment does not recognize the stream type in the message block header.

Structure: <MHEAD> SECS Message Block Header B(10)

Message format

S9F3

<B[10] MHEAD>

S9, F5 - Unrecognized Function Type (UFN)

S, H<--E

Description: The equipment does not recognize the function type in the message block header.

Structure: <MHEAD> SECS Message Block Header B(10)

Message format

S9F5

<B[10] MHEAD>

S9, F7 - Illegal Data (IDN)

S, H<--E

Description: This message indicates that the stream and function were recognized but the associated data format could not be interpreted.

Structure: <MHEAD> SECS Message Block Header B(10)

Message format

S9F7

<B[10] MHEAD>

S9, F9 - Transaction Timer Timeout (TTN)

S, H<--E

Description: This message indicates that a transaction (receive) timer has timed out and that the corresponding transaction has been aborted. User can select from the following timings;

- 1) Timeout between multi-blocks
- 2) T3 retry timeout

Structure: <SHEAD> Stored header related to transaction timer B(10)

Message format

S9F9

<B[10] SHEAD>

Description: Data were expected but none were received within a reasonable length of time. Resources have been cleared.

Structure:

L,2

- | | | |
|-----------|-------------------------------------|------|
| 1. <MEXP> | Message expected in the from SxxFyy | A(6) |
| 2. <EDID> | Expected data ID | ALL |

Possible responses

MEXP	EDID	EDID
S07F03	<PPID>	A(16)

Message format

S9F13

<L[2]

<A[6] MEXP>
<EDID>

>

S10, F0 - Abort Transaction

S, H<->E

Description: Used in lieu of an expected reply to abort a transaction. Function 0 is defined in every stream and has the same meaning in every stream.

Structure: Header only

Message format

S10F0

Header Only

Description: A terminal text message to the host.

Structure:

L,2
 <TID>
 <TEXT>

Message format

S10F1 W

<L[2]

 <B[1] TID>
 <A TEXT>

>

S10, F2 - Terminal Request Acknowledge (TRA)

S, H-->E

Description: Acknowledge or error.

Structure: < ACKC10 > Ack Code B(1)

ACKC10: 0 = Accepted (It is available to display)
 1 = Error, not accepted (Messages are not displayed)
 2 = Error, not accepted (No terminal exists)
 3-63 Reserved

Message format

S10F2

<B[1] ACKC10>

Description: Data to be displayed on the equipment terminal.

Structure:

L,2

1. <TID>
2. <TEXT>

Message format

S10F3 W

<L[2]

<B[1] TID>

<A TEXT>

>

Description: Acknowledge or error.

Structure: < ACKC10> Ack Code B(1)

ACKC10: 0 = Accepted (It is available to display)
 1 = Error, not accepted (Messages are not displayed)
 2 = Error, not accepted (No terminal exists)
 3-63 Reserved

Message format

S10F4

<B[1] ACKC10>

Description: Data to be displayed on the equipment terminal.

Structure:

- L,2
 - 1. <TID>
 - 2. L,n
 - 1. <TEXT1>
 - :
 - :
 - n. <TEXTn>

Message format

S10F5 W

<L[2]

<B[1] TID>

<L

<A TEXT>

...

>

>

Description: Acknowledge or error.

Structure: < ACKC10> Ack Code B(1)

ACKC10:	0 =	Accepted (It is available to display)
	1 =	Error, not accepted (Messages are not displayed)
	2 =	Error, not accepted (No terminal exists)
	3-63	Reserved

Message format

S10F6

<B[1] ACKC10>

Description: This message is used to request a set of specified attributes for one or more objects.

Structure:

- L,5
 - 1. <OBJSPEC>
 - 2. <OBJTYPE>
 - 3. L,I I = identifiers of the object instances requested
 - 1. <OBJID1>
 - ⋮
 - i. <OBJIDi>
 - 4. L,q q = # of object qualifiers to match
 - 1. L, 3
 - 1. <ATTRID1>
 - 2. <ATTRDATA1>
 - 3. <ATTRRELN1>
 - ⋮
 - q. L, 3
 - 1. <ATTRID1>
 - 2. <ATTRDATA1>
 - 3. <ATTRRELN1>
 - 5. L, a a = # of attributes requested
 - 1. <ATTRID1>
 - ⋮
 - a. <ATTRIDa>

Message format

S14F1 W

<L[5]

```

    <A OBJSPEC >
    <A OBJTYPE >
    <L[1]
      <A OBJID1>
    >
    <L[1]
      <L[3]
        <ATTRID1>
        <ATTRDATA1>
        <U1 ATTRRELN1>
      >
    >
    <L[1]
      <ATTRID1>
    >
  >

```

>

Description: This message is used to transfer the set of requested attributes for the specified object(s).
The order of attributes is retained from the primary message.

Structure:

```

L,2
  1. L, n
    1. L, 2
      1. <OBJID1>
      2. L, a
        1. L, 2
          1. <ATTRID1>
          2. <ATTRDATA1>
          :
          a. L, 2
            1. <ATTRIDa>
            2. <ATTRDATAa>
          :
          n. L, 2
            1. <OBJIDn>
            2. L, b
              1. L, 2
                3. <ATTRID1>
                4. <ATTRDATA1>
                :
                b. L, 2
                  3. <ATTRIDb>
                  4. <ATTRDATAb>
              2. L, 2
                1. <OBJACK>
                2. L, p
                  1. L, 2
                    1. <ERRCODE1>
                    2. <ERRTEXT1>
                    :
                    p. L, 2
                      1. <ERRCODEp>
                      2. <ERRTEXTp>

```

Exception: If OBJSPEC is a zero-length item, no object specifier is provided.

If n = 0, no objects matched the specified filter.

If p = 0, no errors were detected.

S14, F2 - GetAttr Data (Continued)

Message format

S14F2

<L[2]

<L[1]

<L[2]

<A OBJID1>

<L[1]

<L[2]

<ATTRID1>

<ATTRDATA1>

>

>

>

>

<L[2]

<OBJACK>

<L[1]

<L[2]

<ERRCODE1>

<ERRTEXT1>

>

>

>

>

2013-06

SECS/GEM COMMUNICATION SPECIFICATION VARIABLES/CONSTANTS/EVENTS LIST

Fully Automatic Dicing Saw

DFD6000 SERIES

UJTWVE*S00B

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Introduction

Purpose

This document is the SECS/GEM Communication Specification for the Fully Automatic Dicing Saw DFD6000 Series. It explains SECS/GEM communication specifications different from each model (variables, constants, events, etc.).

For specifications common to the 6000 series, see the SECS/GEM Communication Specification Common Specification.

NOTICE

<p>This document explains the SECS/GEM communication specifications for the 6000 series standard machine. It does not cover communication specifications added or changed by a user-specified specification.</p>
--

1. Lists of Variables and Constants

Summary of this section

This section explains the variables and constants controlled by the equipment.

Section No.	Title
1-1	List of Variables
1-2	List of Constants
1-3	List of Discrete Variables (DV)

1 – 1. List of Variables

SVID

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1000	FA_Mode	20	1	N/A	N/A	0	1	0=LOCAL 1=REMOTE	Online Substate	Equipment Status	RO	RO	RO
1001	OP_MODE	20	1	N/A	N/A	0	2	0=NEUTRAL 1=FULL AUTO 2=MANUAL	Operation mode	Equipment Status	RO	RO	RO
1002	AlarmsEnabled	0	n	N/A	N/A	N/A	N/A	Alarm event list	Enabled alarm list	Equipment Status	RO	RO	RO
1004	Clock	20	n	N/A	N/A	N/A	N/A	TimeFormat (ECID:4024) 0=12 bytes (YYMMDDHHmmss) 1=16 bytes (YYYYMMDDHHmmsscc)	Date time	Equipment Status	RO	RO	RO
1005	ControlState	10	1	N/A	N/A	N/A	N/A	1=EQUIPMENT-OFFLINE 2=ATTEMPT-ONLINE 3=HOST-OFFLINE 4=ONLINE/LOCAL 5=ONLINE/REMOTE	Control State	Equipment Status	RO	RO	RO
1006	EventsEnabled	0	n	N/A	N/A	N/A	N/A		Enabled event list	Equipment Status	RO	RO	RO
1007	CT_DEV	20	n	N/A	N/A	N/A	N/A		Device No. of Workpiece on C/T	Stage/Station Status	RO	RO	RO
1008	PreviousProcessState	51	1	N/A	N/A	N/A	N/A	1=IDLE 2=SETUP 3=READY 4=EXECUTE 5=PAUSE 6=ALARM	Previous Process State	Equipment Status	RO	RO	RO
1009	ProcessState	51	1	N/A	N/A	N/A	N/A	1=IDLE 2=SETUP 3=READY 4=EXECUTE 5=PAUSE 6=ALARM	Process State	Equipment Status	RO	RO	RO
1010	COM_MODE	20	1	N/A	N/A	N/A	N/A	0=ATTEMPT ON-LINE 1=EQUIPMENT OFF-LINE 2=HOST OFF-LINE 3=ON-LINE	Control State	Equipment Status	RO	RO	RO
1013	PPExecName	20	n	N/A	N/A	N/A	N/A		Device No. of Workpiece on C/T	Equipment Status	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1020	SpoolCountActual	54	4	N/A	N/A	N/A	N/A		Spool count actual	Spool Data	RO	RO	RO
1021	SpoolCountTotal	54	4	N/A	N/A	N/A	N/A		Spool count total	Spool Data	RO	RO	RO
1022	SpoolFullTime	20	16	N/A	N/A	N/A	N/A		Spool full time	Spool Data	RO	RO	RO
1023	SpoolStartTime	20	16	N/A	N/A	N/A	N/A		Spool start time	Spool Data	RO	RO	RO
1024	SpoolStatus	51	1	N/A	N/A	N/A	N/A	0=Not Active 1=Active	Spool State	Spool Data	RO	RO	RO
1025	SpoolFull	51	1	N/A	N/A	N/A	N/A	0=Not Full 1=Full	Spool Full	Spool Data	RO	RO	RO
1100	SVID_SECTION_STATE[4]	52	2	N/A	0	0	8	0=Init 1=Idle 2=Reserved, Not mapping yet 3=Reserved, Mapping already 4=In Process (One or more wafers are transferred) 5=End (All the unprocessed wafers are released) 6=End (All the processed wafers are stored) 8=Disable	Cassette Status	Stage/Station Status	RO	RO	RO
1101	SVID_SECTION_STATE[0]	52	2	N/A	0	0	8	0=Init 1=Idle 2=Alignment 3=Cut 7=End 8=Disable	C/T Status	Stage/Station Status	RO	RO	RO
1102	SVID_SECTION_STATE[1]	52	2	N/A	0	0	8	0=Init 1=Idle 2=Clean/Dry 7=End 8=Disable	S/T Status	Stage/Station Status	RO	RO	RO
1103	SVID_SECTION_STATE[2]	52	2	N/A	0	0	8	0=Init 1=Idle 2=Handling 8=Disable	Clean arm Status	Stage/Station Status	RO	RO	RO
1104	SVID_SECTION_STATE[3]	52	2	N/A	0	0	8	0=Init 1=Idle 2=Loading 3=Unloading 8=Disable	Loader Status	Stage/Station Status	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1106	CTStatus	52	2	N/A	0	0	8	<Stage State> 0=Init 1=Idle 2=Alignment 3=Cut 4=Kerf Check 5=Set-up 7=End 8=Disable	C/T Status	Stage/Station Status	RO	RO	RO
1107	SPStatus	52	2	N/A	0	0	8	<Stage State> 0=Init 1=Idle 2=Clean/Dry 7=End 8=Disable	S/T Status	Stage/Station Status	RO	RO	RO
1108	ClnArmStatus	52	2	N/A	0	0	8	<Stage State> 0=Init 1=Idle 2=Load 8=Disable	Clean arm Status	Stage/Station Status	RO	RO	RO
1109	LoaderStatus	52	2	N/A	0	0	8	<Stage State> 0=Init 1=Idle 2=Loading 3=Unloading 8=Disable	Loader Status	Stage/Station Status	RO	RO	RO
1222	WORK_POS_DEV_NO[1]	20	n	N/A	N/A	N/A	N/A		Device No. of Wafer on centering guide	Stage/Station Status	RO	RO	RO
1223	WORK_GUIDE	32	2	N/A	N/A	N/A	N/A	Slot No. of Wafer on Centering Guide (-1=No Wafer, 0=Unknown)	Slot No. on centering guide	Stage/Station Status	RO	RO	RO
1232	WORK_POS_DEV_NO[0]	20	n	N/A	N/A	N/A	N/A		Device No. of Wafer on C/T	Stage/Station Status	RO	RO	RO
1233	WORK_CT	32	2	N/A	N/A	N/A	N/A	Slot No. of Wafer on CT (-1=No Wafer, 0=Unknown)	Slot No. on C/T	Stage/Station Status	RO	RO	RO
1242	WORK_POS_DEV_NO[4]	20	n	N/A	N/A	N/A	N/A		Device No. of Wafer on S/T	Stage/Station Status	RO	RO	RO
1243	WORK_ST	32	2	N/A	N/A	N/A	N/A	Slot No. of Wafer on SP (-1=No Wafer, 0=Unknown)	Slot No. on S/T	Stage/Station Status	RO	RO	RO
1244	ST_DEV	20	n	N/A	N/A	N/A	N/A		Device No. of Wafer on S/T	Stage/Station Status	RO	RO	RO
1252	WORK_POS_DEV_NO[2]	20	n	N/A	N/A	N/A	N/A		Device No. of Wafer on load arm	Stage/Station Status	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1253	WORK_LOADARM	32	2	N/A	N/A	N/A	N/A	Slot No. of wafer on load arm (-1=No Wafer, 0=Unknown)	Slot No. of wafer on load arm	Stage/Station Status	RO	RO	RO
1262	WORK_POS_DEV_NO[3]	20	n	N/A	N/A	N/A	N/A		Device No. of Wafer on clean arm	Stage/Station Status	RO	RO	RO
1263	WORK_CLNARM	32	2	N/A	N/A	N/A	N/A	Slot No. of Wafer on clean arm (-1=No Wafer, 0=Unknown)	Slot No. of Wafer on clean arm	Stage/Station Status	RO	RO	RO
1272	WORK_POS_DEV_NO[5]	20	n	N/A	N/A	N/A	N/A		Device No. of Wafer on inspection stage	Stage/Station Status	RO	RO	RO
1273	WORK_INSPEC	32	2	N/A	N/A	N/A	N/A	Slot No. of Wafer on inspection stage (-1=No Wafer, 0=Unknown)	Slot No. of Wafer on inspection stage	Stage/Station Status	RO	RO	RO
1282	WORK_POS_DEV_NO[6]	20	n	N/A	N/A	N/A	N/A		Device No. of Wafer on UV stage	Stage/Station Status	RO	RO	RO
1283	WORK_UV	32	2	N/A	N/A	N/A	N/A	Slot No. of Wafer on UV stage (-1=No Wafer, 0=Unknown)	Slot No. of Wafer on UV stage	Stage/Station Status	RO	RO	RO
1300	AUTODOWN_D	34	4	nm	N/A	N/A	N/A		Auto down amount Z1	Blade Informaion	RO	RO	RO
1301	AUTODOWN_D2	34	4	nm	N/A	N/A	N/A		Auto down amount Z2	Blade Informaion	RO	RO	RO
1302	BLADE_EDGE	34	4	nm	N/A	N/A	N/A		Current blade exp. Z1	Blade Informaion	RO	RO	RO
1303	BLADE_EDGE2	34	4	nm	N/A	N/A	N/A		Current blade exp. Z2	Blade Informaion	RO	RO	RO
1304	BLADE_WASTE	34	4	nm	N/A	N/A	N/A		Wear amount (Blade replacement) Z1	Blade Informaion	RO	RO	RO
1305	BLADE_WAST2	34	4	nm	N/A	N/A	N/A		Wear amount (Blade replacement) Z2	Blade Informaion	RO	RO	RO
1306	BLADE_LAST	34	4	nm	N/A	N/A	N/A		Wear amount (Last setup) Z1	Blade Informaion	RO	RO	RO
1307	BLADE_LAST2	34	4	nm	N/A	N/A	N/A		Wear amount (Last setup) Z2	Blade Informaion	RO	RO	RO
1308	BLADE_L1	34	4	mm	N/A	N/A	N/A		Cumulative cut distance (Blade replacement) Z1	Blade Informaion	RO	RO	RO
1309	BLADE_L12	34	4	mm	N/A	N/A	N/A		Cumulative cut distance (Blade replacement) Z2	Blade Informaion	RO	RO	RO
1310	SETUP_L1	34	4	mm	N/A	N/A	N/A		Cumulative cut distance (Last setup) Z1	Blade Informaion	RO	RO	RO
1311	SETUP_L12	34	4	mm	N/A	N/A	N/A		Cumulative cut distance (Last setup) Z2	Blade Informaion	RO	RO	RO
1312	USER_L1	34	4	mm	N/A	N/A	N/A		Cumulative cut distance (Last reset) Z1	Blade Informaion	RO	RO	RO
1313	USER_L12	34	4	mm	N/A	N/A	N/A		Cumulative cut distance (Last reset) Z2	Blade Informaion	RO	RO	RO
1314	COUNT_BLADE	34	4	lines	N/A	N/A	N/A		Cumulative cut lines (Blade replacement) Z1	Blade Informaion	RO	RO	RO
1315	COUNT_BLADE2	34	4	lines	N/A	N/A	N/A		Cumulative cut lines (Blade replacement) Z2	Blade Informaion	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1316	COUNT_SETUP	34	4	lines	N/A	N/A	N/A		Cumulative cut lines (Last setup) Z1	Blade Informaion	RO	RO	RO
1317	COUNT_SETU2	34	4	lines	N/A	N/A	N/A		Cumulative cut lines (Last setup) Z2	Blade Informaion	RO	RO	RO
1318	COUNT_USER	34	4	lines	N/A	N/A	N/A		Cumulative cut lines (Last reset) Z1	Blade Informaion	RO	RO	RO
1319	COUNT_USER2	34	4	lines	N/A	N/A	N/A		Cumulative cut lines (Last reset) Z2	Blade Informaion	RO	RO	RO
1320	B_CT_POSZ	34	4	nm	N/A	N/A	N/A		Setup position Z1	Blade Informaion	RO	RO	RO
1321	B_CT_POSW	34	4	nm	N/A	N/A	N/A		Setup position Z2	Blade Informaion	RO	RO	RO
1350	NOW_CUT_L	34	4	lines	N/A	N/A	N/A		Cutting line	Cut Variable Information	RO	RO	RO
1351	NOW_SPEED	34	4	nm/sec	N/A	N/A	N/A		Feed Speed	Cut Variable Information	RO	RO	RO
1352	NOW_HEIGHT	34	4	nm	N/A	N/A	N/A		Blade height in cutting Z1	Cut Variable Information	RO	RO	RO
1353	NOW_HEIGHT2	34	4	nm	N/A	N/A	N/A		Blade height in cutting Z2	Cut Variable Information	RO	RO	RO
1380	CH_Q[0]	34	4	%	N/A	N/A	N/A		Alignment Q Value (Macro)	Alignment Condition	RO	RO	RO
1381	CH_Q[1]	34	4	%	N/A	N/A	N/A		Alignment Q Value (CH1)	Alignment Condition	RO	RO	RO
1382	CH_Q[2]	34	4	%	N/A	N/A	N/A		Alignment Q Value (CH2)	Alignment Condition	RO	RO	RO
1383	CH_Q[3]	34	4	%	N/A	N/A	N/A		Alignment Q Value (CH3)	Alignment Condition	RO	RO	RO
1384	CH_Q[4]	34	4	%	N/A	N/A	N/A		Alignment Q Value (CH4)	Alignment Condition	RO	RO	RO
1400	KERF_CENTER	34	4	nm	N/A	N/A	N/A		Off center Z1	Kerf Check Variable Condition	RO	RO	RO
1401	KERF2CENTER	34	4	nm	N/A	N/A	N/A		Off center Z2	Kerf Check Variable Condition	RO	RO	RO
1402	KERF_CHIP_A	34	4	pixel	N/A	N/A	N/A		Chipping area Z1	Kerf Check Variable Condition	RO	RO	RO
1403	KERF2CHIP_A	34	4	pixel	N/A	N/A	N/A		Chipping area Z2	Kerf Check Variable Condition	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1404	KERF_CHIP_W	34	4	nm	N/A	N/A	N/A		Chipping size Z1	Kerf Check Variable Condition	RO	RO	RO
1405	KERF2CHIP_W	34	4	nm	N/A	N/A	N/A		Chipping size Z2	Kerf Check Variable Condition	RO	RO	RO
1406	KERF_HALF	34	4	nm	N/A	N/A	N/A		Kerf width (center - chipping) Z1	Kerf Check Variable Condition	RO	RO	RO
1407	KERF2HALF	34	4	nm	N/A	N/A	N/A		Kerf width (center - chipping) Z2	Kerf Check Variable Condition	RO	RO	RO
1408	KERF_MAX	34	4	nm	N/A	N/A	N/A		Kerf width (including chipping) Z1	Kerf Check Variable Condition	RO	RO	RO
1409	KERF2MAX	34	4	nm	N/A	N/A	N/A		Kerf width (including chipping) Z2	Kerf Check Variable Condition	RO	RO	RO
1410	KERF_POINT	34	4	%	N/A	N/A	N/A		Kerf score Z1	Kerf Check Variable Condition	RO	RO	RO
1411	KERF2POINT	34	4	%	N/A	N/A	N/A		Kerf score Z2	Kerf Check Variable Condition	RO	RO	RO
1412	KERF_WIDTH	34	4	nm	N/A	N/A	N/A		Kerf width Z1	Kerf Check Variable Condition	RO	RO	RO
1413	KERF2WIDTH	34	4	nm	N/A	N/A	N/A		Kerf width Z2	Kerf Check Variable Condition	RO	RO	RO
1430	M_DEVNO[0]	20	n	N/A	N/A	N/A	N/A		Device data 1 (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1431	M_DEVNO[1]	20	n	N/A	N/A	N/A	N/A		Device data 2 (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1432	M_DEVNO[2]	20	n	N/A	N/A	N/A	N/A		Device data 3 (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1433	M_DEVNO[3]	20	n	N/A	N/A	N/A	N/A		Device data 4 (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1434	M_DEVNO[4]	20	n	N/A	N/A	N/A	N/A		Device data 5 (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1435	M_DEVNO[5]	20	n	N/A	N/A	N/A	N/A		Device data 6 (Multiple device full automation)	Multi Recipe Name	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1436	M_DEVNO[6]	20	n	N/A	N/A	N/A	N/A		Device data 7 (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1437	M_DEVNO[7]	20	n	N/A	N/A	N/A	N/A		Device data 8 (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1460	PCE_NO[0]	54	4	N/A	N/A	N/A	N/A		Device 1 start slot No. (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1461	PCE_NO[1]	54	4	N/A	N/A	N/A	N/A		Device 2 start slot No. (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1462	PCE_NO[2]	54	4	N/A	N/A	N/A	N/A		Device 3 start slot No. (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1463	PCE_NO[3]	54	4	N/A	N/A	N/A	N/A		Device 4 start slot No. (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1464	PCE_NO[4]	54	4	N/A	N/A	N/A	N/A		Device 5 start slot No. (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1465	PCE_NO[5]	54	4	N/A	N/A	N/A	N/A		Device 6 start slot No. (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1466	PCE_NO[6]	54	4	N/A	N/A	N/A	N/A		Device 7 start slot No. (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1467	PCE_NO[7]	54	4	N/A	N/A	N/A	N/A		Device 8 start slot No. (Multiple device full automation)	Multi Recipe Name	RO	RO	RO
1500	DCBL_REV	34	4	/min	0	0	60000		Spindle Revolution Z1	Other Variable Condition	RO	RO	RO
1501	DCBL_REV2	34	4	/min	0	0	60000		Spindle Revolution Z2	Other Variable Condition	RO	RO	RO
1502	DCBL_CUR	34	4	mA	0	0	9999999		Spindle load current Z1	Other Variable Condition	RO	RO	RO
1503	DCBL_CUR2	34	4	mA	0	0	9999999		Spindle load current Z2	Other Variable Condition	RO	RO	RO
1520	COUNT_WORK	34	4	N/A	N/A	N/A	N/A		Production	Other Variable Condition	RO	RO	RO
1521	COUNT_WORK2	34	4	N/A	N/A	N/A	N/A		Production (It is possible to reset by operator)	Other Variable Condition	RO	RO	RO
1522	PEACE_FIN	34	4	N/A	N/A	N/A	N/A		Number of processed workpiece	Other Variable Condition	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1550	PAT_MODE	20	n	N/A	N/A	N/A	N/A	"IDLE" "ALARM" "AUTO" "AUTO1" "FULLAUTO" "WAIT" "MANUAL" "CALL0" "CALL1" "CALL2" "CALL3" "USER"	Signal tower mode	Other Variable Condition	RO	RO	RO
1551	ERRF	34	4	N/A	-1	-1	N/A	Error number (except for -1 and 0)	Error control	Other Variable Condition	RO	RO	RO
1552	CUTF	10	1	N/A	0	0	1	1=Now cutting 0=Others	Cutting status	Other Variable Condition	RO	RO	RO
1554	INITIALF	10	1	N/A	0	0	1	1=System initial completed 0=Not completed yet	System Initialize status	Other Variable Condition	RO	RO	RO
1555	WATERF	10	1	N/A	0	0	1	1=Cutting wafer of Z1 axis is ON. 0=Cutting wafer of Z1 axis is OFF.	Cut water status Z1	Other Variable Condition	RO	RO	RO
1556	WATERF2	10	1	N/A	0	0	1	1=Cutting wafer of Z2 axis is ON. 0=Cutting wafer of Z2 axis is OFF.	Cut water status Z2	Other Variable Condition	RO	RO	RO
1557	SETUPF1	10	1	N/A	0	0	1	1=Z1 axis set up completed 0=Z1 axis set up not completed	Setup status Z1	Other Variable Condition	RO	RO	RO
1558	SETUPF2	10	1	N/A	0	0	1	1=Z2 axis set up completed 0=Z2 axis set up not completed	Setup status Z2	Other Variable Condition	RO	RO	RO
1559	SPNDLF	10	1	N/A	0	0	1	1=Z1 axis SPNDL-ON 0=Z1 axis SPNDL-OFF	Spindle Status Z1	Other Variable Condition	RO	RO	RO
1560	SPNDLF2	10	1	N/A	0	0	1	1=Z2 axis SPNDL-ON 0=Z2 axis SPNDL-OFF	Spindle Status Z2	Other Variable Condition	RO	RO	RO
1600	MAP_DI[0]	52	2	N/A	N/A	N/A	N/A	Bit0 0=Port No.0 is OFF 1=PortNo.0 is ON ... Bit15 0=Port No.15 is OFF 1=Port No.15 is ON	DI board status No.0	Other Variable Condition	RO	RO	RO
1601	MAP_DI[1]	52	2	N/A	N/A	N/A	N/A		DI board status No.1	Other Variable Condition	RO	RO	RO
1602	MAP_DI[2]	52	2	N/A	N/A	N/A	N/A		DI board status No.2	Other Variable Condition	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1603	MAP_DI[3]	52	2	N/A	N/A	N/A	N/A		DI board status No.3	Other Variable Condition	RO	RO	RO
1604	MAP_DI[4]	52	2	N/A	N/A	N/A	N/A		DI board status No.4	Other Variable Condition	RO	RO	RO
1605	MAP_DI[5]	52	2	N/A	N/A	N/A	N/A		DI board status No.5	Other Variable Condition	RO	RO	RO
1606	MAP_DI[6]	52	2	N/A	N/A	N/A	N/A		DI board status No.6	Other Variable Condition	RO	RO	RO
1607	MAP_DI[7]	52	2	N/A	N/A	N/A	N/A		DI board status No.7	Other Variable Condition	RO	RO	RO
1608	MAP_DI[8]	52	2	N/A	N/A	N/A	N/A		DI board status No.8	Other Variable Condition	RO	RO	RO
1609	MAP_DI[9]	52	2	N/A	N/A	N/A	N/A		DI board status No.9	Other Variable Condition	RO	RO	RO
1610	MAP_DI[10]	52	2	N/A	N/A	N/A	N/A		DI board status No.10	Other Variable Condition	RO	RO	RO
1611	MAP_DI[11]	52	2	N/A	N/A	N/A	N/A		DI board status No.11	Other Variable Condition	RO	RO	RO
1612	MAP_DI[12]	52	2	N/A	N/A	N/A	N/A		DI board status No.12	Other Variable Condition	RO	RO	RO
1613	MAP_DI[13]	52	2	N/A	N/A	N/A	N/A		DI board status No.13	Other Variable Condition	RO	RO	RO
1614	MAP_DI[14]	52	2	N/A	N/A	N/A	N/A		DI board status No.14	Other Variable Condition	RO	RO	RO
1615	MAP_DI[15]	52	2	N/A	N/A	N/A	N/A		DI board status No.15	Other Variable Condition	RO	RO	RO
1616	MAP_DI[16]	52	2	N/A	N/A	N/A	N/A		DI board status No.16	Other Variable Condition	RO	RO	RO
1617	MAP_DI[17]	52	2	N/A	N/A	N/A	N/A		DI board status No.17	Other Variable Condition	RO	RO	RO
1618	MAP_DI[18]	52	2	N/A	N/A	N/A	N/A		DI board status No.18	Other Variable Condition	RO	RO	RO
1619	MAP_DI[19]	52	2	N/A	N/A	N/A	N/A		DI board status No.19	Other Variable Condition	RO	RO	RO
1620	MAP_DI[20]	52	2	N/A	N/A	N/A	N/A		DI board status No.20	Other Variable Condition	RO	RO	RO
1621	MAP_DI[21]	52	2	N/A	N/A	N/A	N/A		DI board status No.21	Other Variable Condition	RO	RO	RO
1622	MAP_DI[22]	52	2	N/A	N/A	N/A	N/A		DI board status No.22	Other Variable Condition	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1623	MAP_DI[23]	52	2	N/A	N/A	N/A	N/A		DI board status No.23	Other Variable Condition	RO	RO	RO
1624	MAP_DI[24]	52	2	N/A	N/A	N/A	N/A		DI board status No.24	Other Variable Condition	RO	RO	RO
1625	MAP_DI[25]	52	2	N/A	N/A	N/A	N/A		DI board status No.25	Other Variable Condition	RO	RO	RO
1626	MAP_DI[26]	52	2	N/A	N/A	N/A	N/A		DI board status No.26	Other Variable Condition	RO	RO	RO
1627	MAP_DI[27]	52	2	N/A	N/A	N/A	N/A		DI board status No.27	Other Variable Condition	RO	RO	RO
1628	MAP_DI[28]	52	2	N/A	N/A	N/A	N/A		DI board status No.28	Other Variable Condition	RO	RO	RO
1629	MAP_DI[29]	52	2	N/A	N/A	N/A	N/A		DI board status No.29	Other Variable Condition	RO	RO	RO
1630	MAP_DI[30]	52	2	N/A	N/A	N/A	N/A		DI board status No.30	Other Variable Condition	RO	RO	RO
1631	MAP_DI[31]	52	2	N/A	N/A	N/A	N/A		DI board status No.31	Other Variable Condition	RO	RO	RO
1650	MAP_DO[0]	52	2	N/A	N/A	N/A	N/A	Bit0 0=Port No.0 is OFF 1=PortNo.0 is ON ... Bit15 0=Port No.15 is OFF 1=Port No.15 is ON	DO board status No.0	Other Variable Condition	RO	RO	RO
1651	MAP_DO[1]	52	2	N/A	N/A	N/A	N/A		DO board status No.1	Other Variable Condition	RO	RO	RO
1652	MAP_DO[2]	52	2	N/A	N/A	N/A	N/A		DO board status No.2	Other Variable Condition	RO	RO	RO
1653	MAP_DO[3]	52	2	N/A	N/A	N/A	N/A		DO board status No.3	Other Variable Condition	RO	RO	RO
1654	MAP_DO[4]	52	2	N/A	N/A	N/A	N/A		DO board status No.4	Other Variable Condition	RO	RO	RO
1655	MAP_DO[5]	52	2	N/A	N/A	N/A	N/A		DO board status No.5	Other Variable Condition	RO	RO	RO
1656	MAP_DO[6]	52	2	N/A	N/A	N/A	N/A		DO board status No.6	Other Variable Condition	RO	RO	RO
1657	MAP_DO[7]	52	2	N/A	N/A	N/A	N/A		DO board status No.7	Other Variable Condition	RO	RO	RO
1658	MAP_DO[8]	52	2	N/A	N/A	N/A	N/A		DO board status No.8	Other Variable Condition	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1659	MAP_DO[9]	52	2	N/A	N/A	N/A	N/A		DO board status No.9	Other Variable Condition	RO	RO	RO
1660	MAP_DO[10]	52	2	N/A	N/A	N/A	N/A		DO board status No.10	Other Variable Condition	RO	RO	RO
1661	MAP_DO[11]	52	2	N/A	N/A	N/A	N/A		DO board status No.11	Other Variable Condition	RO	RO	RO
1662	MAP_DO[12]	52	2	N/A	N/A	N/A	N/A		DO board status No.12	Other Variable Condition	RO	RO	RO
1663	MAP_DO[13]	52	2	N/A	N/A	N/A	N/A		DO board status No.13	Other Variable Condition	RO	RO	RO
1664	MAP_DO[14]	52	2	N/A	N/A	N/A	N/A		DO board status No.14	Other Variable Condition	RO	RO	RO
1665	MAP_DO[15]	52	2	N/A	N/A	N/A	N/A		DO board status No.15	Other Variable Condition	RO	RO	RO
1666	MAP_DO[16]	52	2	N/A	N/A	N/A	N/A		DO board status No.16	Other Variable Condition	RO	RO	RO
1667	MAP_DO[17]	52	2	N/A	N/A	N/A	N/A		DO board status No.17	Other Variable Condition	RO	RO	RO
1668	MAP_DO[18]	52	2	N/A	N/A	N/A	N/A		DO board status No.18	Other Variable Condition	RO	RO	RO
1669	MAP_DO[19]	52	2	N/A	N/A	N/A	N/A		DO board status No.19	Other Variable Condition	RO	RO	RO
1670	MAP_DO[20]	52	2	N/A	N/A	N/A	N/A		DO board status No.20	Other Variable Condition	RO	RO	RO
1671	MAP_DO[21]	52	2	N/A	N/A	N/A	N/A		DO board status No.21	Other Variable Condition	RO	RO	RO
1672	MAP_DO[22]	52	2	N/A	N/A	N/A	N/A		DO board status No.22	Other Variable Condition	RO	RO	RO
1673	MAP_DO[23]	52	2	N/A	N/A	N/A	N/A		DO board status No.23	Other Variable Condition	RO	RO	RO
1674	MAP_DO[24]	52	2	N/A	N/A	N/A	N/A		DO board status No.24	Other Variable Condition	RO	RO	RO
1675	MAP_DO[25]	52	2	N/A	N/A	N/A	N/A		DO board status No.25	Other Variable Condition	RO	RO	RO
1676	MAP_DO[26]	52	2	N/A	N/A	N/A	N/A		DO board status No.26	Other Variable Condition	RO	RO	RO
1677	MAP_DO[27]	52	2	N/A	N/A	N/A	N/A		DO board status No.27	Other Variable Condition	RO	RO	RO
1678	MAP_DO[28]	52	2	N/A	N/A	N/A	N/A		DO board status No.28	Other Variable Condition	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1679	MAP_DO[29]	52	2	N/A	N/A	N/A	N/A		DO board status No.29	Other Variable Condition	RO	RO	RO
1680	MAP_DO[30]	52	2	N/A	N/A	N/A	N/A		DO board status No.30	Other Variable Condition	RO	RO	RO
1681	MAP_DO[31]	52	2	N/A	N/A	N/A	N/A		DO board status No.31	Other Variable Condition	RO	RO	RO
1690	SVID_SENSOR_STATE[0]	10	1	N/A	0	0	1	0=OFF 1=ON	C/T Vacuum Status	Carrier Management	RO	RO	RO
1691	SVID_SENSOR_STATE[1]	10	1	N/A	0	0	1	0=OFF 1=ON	S/T Vacuum Status	Carrier Management	RO	RO	RO
1692	SVID_SENSOR_STATE[2]	10	1	N/A	0	0	1	0=OFF 1=ON	Clean arm Vacuum Status	Carrier Management	RO	RO	RO
1693	SVID_SENSOR_STATE[3]	10	1	N/A	0	0	1	0=OFF 1=ON	Load arm Vacuum Status	Carrier Management	RO	RO	RO
1694	SVID_SENSOR_STATE[4]	10	1	N/A	0	0	1	0=OFF 1=ON	Cassette sensor Status	Carrier Management	RO	RO	RO
1695	CT_Vacume_State	10	1	N/A	0	0	1	0=OFF 1=ON	C/T Vacuum Status	Carrier Management	RO	RO	RO
1696	SP_Vacume_State	10	1	N/A	0	0	1	0=OFF 1=ON	S/T Vacuum Status	Carrier Management	RO	RO	RO
1697	ClnArm_Vacume_State	10	1	N/A	0	0	1	0=OFF 1=ON	Clean arm Vacuum Status	Carrier Management	RO	RO	RO
1698	LoadArm_Vacume_State	10	1	N/A	0	0	1	0=OFF 1=ON	Load arm Vacuum Status	Carrier Management	RO	RO	RO
1699	CassetteDetectSensor	10	1	N/A	0	0	1	0=OFF 1=ON	Cassette sensor Status	Carrier Management	RO	RO	RO
1700	WORK_1	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 1	Cassette Status	RO	RO	RO
1701	WORK_2	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 2	Cassette Status	RO	RO	RO
1702	WORK_3	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 3	Cassette Status	RO	RO	RO
1703	WORK_4	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 4	Cassette Status	RO	RO	RO
1704	WORK_5	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 5	Cassette Status	RO	RO	RO
1705	WORK_6	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 6	Cassette Status	RO	RO	RO
1706	WORK_7	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 7	Cassette Status	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1707	WORK_8	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 8	Cassette Status	RO	RO	RO
1708	WORK_9	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 9	Cassette Status	RO	RO	RO
1709	WORK_10	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 10	Cassette Status	RO	RO	RO
1710	WORK_11	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 11	Cassette Status	RO	RO	RO
1711	WORK_12	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 12	Cassette Status	RO	RO	RO
1712	WORK_13	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 13	Cassette Status	RO	RO	RO
1713	WORK_14	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 14	Cassette Status	RO	RO	RO
1714	WORK_15	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 15	Cassette Status	RO	RO	RO
1715	WORK_16	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 16	Cassette Status	RO	RO	RO
1716	WORK_17	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 17	Cassette Status	RO	RO	RO
1717	WORK_18	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 18	Cassette Status	RO	RO	RO
1718	WORK_19	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 19	Cassette Status	RO	RO	RO
1719	WORK_20	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 20	Cassette Status	RO	RO	RO
1720	WORK_21	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 21	Cassette Status	RO	RO	RO
1721	WORK_22	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 22	Cassette Status	RO	RO	RO
1722	WORK_23	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 23	Cassette Status	RO	RO	RO
1723	WORK_24	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 24	Cassette Status	RO	RO	RO
1724	WORK_25	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 25	Cassette Status	RO	RO	RO
1725	WORK_26	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 26	Cassette Status	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1726	WORK_27	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 27	Cassette Status	RO	RO	RO
1727	WORK_28	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 28	Cassette Status	RO	RO	RO
1728	WORK_29	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 29	Cassette Status	RO	RO	RO
1729	WORK_30	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 30	Cassette Status	RO	RO	RO
1730	WORK_31	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 31	Cassette Status	RO	RO	RO
1731	WORK_32	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 32	Cassette Status	RO	RO	RO
1732	WORK_33	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 33	Cassette Status	RO	RO	RO
1733	WORK_34	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 34	Cassette Status	RO	RO	RO
1734	WORK_35	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 35	Cassette Status	RO	RO	RO
1735	WORK_36	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 36	Cassette Status	RO	RO	RO
1736	WORK_37	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 37	Cassette Status	RO	RO	RO
1737	WORK_38	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 38	Cassette Status	RO	RO	RO
1738	WORK_39	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 39	Cassette Status	RO	RO	RO
1739	WORK_40	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 40	Cassette Status	RO	RO	RO
1740	WORK_41	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 41	Cassette Status	RO	RO	RO
1741	WORK_42	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 42	Cassette Status	RO	RO	RO
1742	WORK_43	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 43	Cassette Status	RO	RO	RO
1743	WORK_44	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 44	Cassette Status	RO	RO	RO
1744	WORK_45	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 45	Cassette Status	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1745	WORK_46	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 46	Cassette Status	RO	RO	RO
1746	WORK_47	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 47	Cassette Status	RO	RO	RO
1747	WORK_48	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 48	Cassette Status	RO	RO	RO
1748	WORK_49	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 49	Cassette Status	RO	RO	RO
1749	WORK_50	34	4	N/A	N/A	N/A	N/A	→Refer to [SVID 1700 to 1749 (cassette state 1 to 50) data]	Cassette Status 50	Cassette Status	RO	RO	RO
1750	MAP_WORK	20	50	N/A	N/A	N/A	N/A	0=No data 1=Data exist	Slot Mapping Information	Cassette Status	RO	RO	RO
1751	CASSET_NO	51	1	N/A	1	0	2		Number of cassette set	Cassette Status	RO	RO	RO
1752	AVAL_PRES[0]	52	2	N/A	N/A	N/A	N/A		Main Air Pressure Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1753	AVAL_PRES[1]	52	2	N/A	N/A	N/A	N/A		Clean Air Pressure Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1754	AVAL_PRES[2]	52	2	N/A	N/A	N/A	N/A		Water Pressure Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1755	AVAL_PRES[3]	52	2	N/A	N/A	N/A	N/A		C/T Work Vacuum Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1756	AVAL_PRES[4]	52	2	N/A	N/A	N/A	N/A		S/T Work Vacuum Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1757	AVAL_PRES[5]	52	2	N/A	N/A	N/A	N/A		High Pressure Pump Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1758	AVAL_PRES[6]	52	2	N/A	N/A	N/A	N/A		C/T Table Vacuum Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1759	AVAL_PRES[7]	52	2	N/A	N/A	N/A	N/A		Upper Arm Vacuum Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1760	AVAL_PRES[8]	52	2	N/A	N/A	N/A	N/A		Lower Arm Vacuum Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1761	AVAL_B_S_N[0]	52	2	N/A	N/A	N/A	N/A		BBD Level Z1 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1762	AVAL_B_S_N[1]	52	2	N/A	N/A	N/A	N/A		BBD Level Z2 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1763	AVAL_B_S_N[2]	52	2	N/A	N/A	N/A	N/A		Spindle Current Z1 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1764	AVAL_B_S_N[3]	52	2	N/A	N/A	N/A	N/A		Spindle Rev. Z1 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1765	AVAL_B_S_N[4]	52	2	N/A	N/A	N/A	N/A		Spindle Current Z2 Analog Input Value	Analog Sensor Input Value	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1766	AVAL_B_S_N[5]	52	2	N/A	N/A	N/A	N/A		Spindle Rev. Z2 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1767	AVAL_B_S_N[6]	52	2	N/A	N/A	N/A	N/A		NCS Level Z1 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1768	AVAL_B_S_N[7]	52	2	N/A	N/A	N/A	N/A		NCS Level Z2 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1769	AVAL_WATER[0]	52	2	N/A	N/A	N/A	N/A		Blade Nozzle Flow Rate Z1 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1770	AVAL_WATER[1]	52	2	N/A	N/A	N/A	N/A		Blade Nozzle (Rear) Flow Rate Z1 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1771	AVAL_WATER[2]	52	2	N/A	N/A	N/A	N/A		Shower Nozzle Flow Rate Z1 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1772	AVAL_WATER[3]	52	2	N/A	N/A	N/A	N/A		Spray Nozzle Flow Rate Z1 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1773	AVAL_WATER[4]	52	2	N/A	N/A	N/A	N/A		Blade Nozzle Flow Rate Z2 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1774	AVAL_WATER[5]	52	2	N/A	N/A	N/A	N/A		Blade Nozzle (Rear) Flow Rate Z2 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1775	AVAL_WATER[6]	52	2	N/A	N/A	N/A	N/A		Shower Nozzle Flow Rate Z2 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1776	AVAL_WATER[7]	52	2	N/A	N/A	N/A	N/A		Spray Nozzle Flow Rate Z2 Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1777	TEMP_HUP	52	2	N/A	N/A	N/A	N/A		Holder Upper Temp Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1778	TEMP_HLOW	52	2	N/A	N/A	N/A	N/A		Holder Lower Temp Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1779	TEMP_NCS1	52	2	N/A	N/A	N/A	N/A		NCS Z1 Temp Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1780	TEMP_NCS2	52	2	N/A	N/A	N/A	N/A		NCS Z2 Temp Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1781	TEMP_COL	52	2	N/A	N/A	N/A	N/A		Column Temp Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1782	TEMP_BASE	52	2	N/A	N/A	N/A	N/A		Table Base Temp Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1783	TEMP_CT	52	2	N/A	N/A	N/A	N/A		Theta Base Temp Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1784	TEMP_WATER	52	2	N/A	N/A	N/A	N/A		Cutting Water Temp Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1785	AVAL_PRES[9]	52	2	N/A	N/A	N/A	N/A		Atomizing Nozzle Clean air Press.(S/T) Analog Input Value	Analog Sensor Input Value	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
1786	UV_SENS_VAL[0]	52	2	N/A	N/A	N/A	N/A		UV Irradiance 1 Analog Input Value	UV Sensor Adjustment	RO	RO	RO
1787	UV_SENS_VAL[1]	52	2	N/A	N/A	N/A	N/A		UV Irradiance 2 Analog Input Value	UV Sensor Adjustment	RO	RO	RO
1788	UV_SENS_VAL[2]	52	2	N/A	N/A	N/A	N/A		UV Irradiance 3 Analog Input Value	UV Sensor Adjustment	RO	RO	RO
1789	UV_SENS_VAL[3]	52	2	N/A	N/A	N/A	N/A		UV Irradiance 4 Analog Input Value	UV Sensor Adjustment	RO	RO	RO
1790	UV_SENS_VAL[4]	52	2	N/A	N/A	N/A	N/A		UV Irradiance 5 Analog Input Value	UV Sensor Adjustment	RO	RO	RO
1791	UV_SENS_VAL[5]	52	2	N/A	N/A	N/A	N/A		UV Irradiance 6 Analog Input Value	UV Sensor Adjustment	RO	RO	RO
1792	UV_SENS_VAL[6]	52	2	N/A	N/A	N/A	N/A		UV Irradiance 7 Analog Input Value	UV Sensor Adjustment	RO	RO	RO
1793	UV_SENS_VAL[7]	52	2	N/A	N/A	N/A	N/A		UV Irradiance 8 Analog Input Value	UV Sensor Adjustment	RO	RO	RO
1794	AVAL_PRES[10]	52	2	N/A	N/A	N/A	N/A		Jig Vacuum pressure Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1795	AVAL_PRES[11]	52	2	N/A	N/A	N/A	N/A		Vacuum pump pressure Analog Input Value	Analog Sensor Input Value	RO	RO	RO
1796	UV_SENS_VAL[8]	52	2	N/A	N/A	N/A	N/A		UV Irradiance 9 Analog Input Value	UV Sensor Adjustment	RO	RO	RO
1797	UV_SENS_VAL[9]	52	2	N/A	N/A	N/A	N/A		UV Irradiance 10 Analog Input Value	UV Sensor Adjustment	RO	RO	RO
2500	CT_SENSOR	34	4	nm	N/A	N/A	N/A		NCS calibration Z1	Blade Informaion	RO	RO	RO
2501	CT_SENSOR2	34	4	nm	N/A	N/A	N/A		NCS calibration Z2	Blade Informaion	RO	RO	RO
2502	NCS_POSZ[0]	34	4	nm	N/A	N/A	N/A		NCS pos 1st Z1	Blade Informaion	RO	RO	RO
2503	NCS_POSZ[1]	34	4	nm	N/A	N/A	N/A		NCS pos 2nd Z1	Blade Informaion	RO	RO	RO
2504	NCS_POSZ[2]	34	4	nm	N/A	N/A	N/A		NCS pos 3rd Z1	Blade Informaion	RO	RO	RO
2505	NCS_POSW[0]	34	4	nm	N/A	N/A	N/A		NCS pos 1st Z2	Blade Informaion	RO	RO	RO
2506	NCS_POSW[1]	34	4	nm	N/A	N/A	N/A		NCS pos 2nd Z2	Blade Informaion	RO	RO	RO
2507	NCS_POSW[2]	34	4	nm	N/A	N/A	N/A		NCS pos 3rd Z2	Blade Informaion	RO	RO	RO
2601	PRESENT_SDF	20	n	N/A	N/A	N/A	N/A		Label name of current screen	Other Variable Condition	RO	RO	RO
2602	FULL_BREAK	34	4	N/A	0	0	1	0=Not requested 1=Requested	Request to abort fullauto	Other Variable Condition	RO	RO	RO
3213	CDU_UNITSTAT	34	4	N/A	N/A	N/A	N/A		CO2 Injector Unit Status (DO)	CO2 Injector Maintenance	RO	RO	RO
3218	UV_LAMP_SPEND_HH	34	4	N/A	N/A	N/A	N/A		UV Lamp Total Time (hour)	UV Sensor Adjustment	RO	RO	RO

SVID (Continued)

SVID	SVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
3219	UV_LAMP_SPEND_MM	34	4	N/A	N/A	N/A	N/A		UV Lamp Total Time (minute)	UV Sensor Adjustment	RO	RO	RO
3220	UV_LAMP_SPEND_SS	34	4	N/A	N/A	N/A	N/A		UV Lamp Total Time (second)	UV Sensor Adjustment	RO	RO	RO
3222	CDU_UNITSTAT[1]	34	4	N/A	N/A	N/A	N/A		CO2 Injector Unit Status (DI)	CO2 Injector Maintenance	RO	RO	RO
3223	CDU_UNITSTAT[2]	34	4	kOhm cm	N/A	N/A	N/A		CO2 Injector Resitivity (kΩ cm)	CO2 Injector Maintenance	RO	RO	RO
3224	CDU_UNITSTAT[3]	34	4	%	N/A	N/A	N/A		CO2 Injector Current Valve	CO2 Injector Maintenance	RO	RO	RO
3225	CDU_UNITSTAT[4]	34	4	kOhm cm	N/A	N/A	N/A		CO2 Injector Resitivity Offset (kΩ cm)	CO2 Injector Maintenance	RO	RO	RO
3246	AVAL_DCI[0]	34	4	N/A	N/A	N/A	N/A		CO2inj. TotalFlow Analog Input Value	Analog Sensor Input Value	RO	RO	RO
3247	AVAL_DCI[1]	34	4	N/A	N/A	N/A	N/A		CO2inj. Resitivity Analog Input Value	Analog Sensor Input Value	RO	RO	RO
3248	AVAL_PRES[12]	34	4	N/A	N/A	N/A	N/A		Work vacuum B pressure Analog Input Value	Analog Sensor Input Value	RO	RO	RO
3300	HAIR_W_NM	34	4	nm	N/A	N/A	N/A		Width of Hair line	Other Variable Condition	RO	RO	RO
3308	PEACE_TOTAL	34	4	line	N/A	N/A	N/A		Total number of workpiece	Other Variable Condition	RO	RO	RO
3997	CLEARANCE	34	4	nm	0	N/A	N/A		Clearance to workpiece	Blade Informaion	RO	RO	RO
3998	CLEARANCE2	34	4	nm	0	N/A	N/A		Clearance to workpiece	Blade Informaion	RO	RO	RO
7246	AVAL_DCI[0]	34	4	N/A	N/A	N/A	N/A		CO2inj. TotalFlow Analog Input Value	Analog Sensor Input Value	RO	RO	RO
7247	AVAL_DCI[1]	34	4	N/A	N/A	N/A	N/A		CO2inj. Resitivity Analog Input Value	Analog Sensor Input Value	RO	RO	RO
7248	AVAL_PRES[12]	34	4	N/A	N/A	N/A	N/A		Work vacuum B pressure Analog Input Value	Analog Sensor Input Value	RO	RO	RO
7407	PEACE_FIN	34	4	pcs	N/A	N/A	N/A		Number of processed workpiece	Full Automation	RO	RO	RO
7408	PEACE_TOTAL	34	4	pcs	N/A	N/A	N/A		Total number of workpiece	Full Automation	RO	RO	RO

SVID 1700 to 1749 (cassette state 1 to 50) data

- The data is an up-to-9-digit number which consists of 3 groups. (Data format: XXXYYYYZZZ)
- Details indicated by each data differ depending on the software version of the machine.

ZZZ: workpiece position:

Value	Details	
	When the software version of the machine is 2.3 or later	When the software version of the machine is earlier than 2.3
0	Unprocessed	Unprocessed
1	Request to pull out the workpiece (The workpiece is in the cassette.)	Request to pull out the workpiece (The workpiece is in the cassette.)
2	Frame centering → arm	Frame centering → arm
3	Arm → chuck table	Arm → chuck table
4	A process (such as alignment or cutting) is being executed on the chuck table.	A process (such as alignment or cutting) is being executed on the chuck table.
5	Chuck table → arm	Chuck table → arm
6	Arm → spinner table	Arm → spinner table
7	Spinner cleaning is being performed.	Spinner cleaning is being performed.
8	Spinner table → arm	Spinner table → arm
9	Arm → frame centering	Arm → frame centering
10	Frame centering → UV cassette (before cutting)	Frame centering → UV
11	Frame centering → UV cassette	UV irradiation is being performed.
12	UV irradiation is being performed (before cutting).	UV → frame centering
13	UV irradiation is being performed.	Inspection is being performed.
14	UV cassette → frame centering (before cutting)	Inspection → frame centering
15	UV cassette → frame centering	Frame centering → cassette
16	Inspection is being performed.	Processing has been completed.
17	Inspection → frame centering	No workpiece
18	Frame centering → cassette	-
19	Processing has been completed.	-
20	No workpiece	-

SVID 1700 to 1749 (cassette state 1 to 50) data (Continued)

YYY: workpiece process transition state

Value	Details	
	When the software version of the machine is 2.3 or later	When the software version of the machine is earlier than 2.3
0	Before processing (Workpiece check has not been performed.)	Before processing (Workpiece check has not been performed.)
1	No workpiece	No workpiece
2	There is a workpiece unprocessed.	There is a workpiece unprocessed.
3	Loading is being performed.	Loading is being performed.
4	UV irradiation before cutting is being performed.	Loading has been completed.
5	Loading has been completed.	Alignment is being performed.
6	Alignment is being performed.	Alignment has been completed
7	Alignment has been completed	Cutting is being performed.
8	Cutting is being performed.	Cutting has been completed.
9	Cutting has been completed.	Workpiece is being traveling from the chuck table to the sinner table.
10	Workpiece is being traveling from the chuck table to the sinner table.	Spinner cleaning is being performed.
11	Spinner cleaning is being performed.	Spinner cleaning has been completed.
12	Spinner cleaning has been completed.	Workpiece is being unloaded.
13	Workpiece is being unloaded.	UV irradiation is being performed.
14	UV irradiation is being performed.	Inspection is being performed.
15	Inspection is being performed.	Operation has been normally completed.
16	Operation has been normally completed.	-

SVID 1700 to 1749 (cassette state 1 to 50) data (Continued)

XXX: workpiece processing state

"XXX" is replaced by the total number of the values indicating the states listed in the table below.

Value	Details	
	When the software version of the machine is 2.3 or later	When the software version of the machine is earlier than 2.3
1	Abnormality in frame sensing	Abnormality in frame sensing
2	Alignment has been stopped.	Alignment has been stopped.
4	Cutting has been stopped.	Cutting has been stopped.
8	Workpiece has been removed.	Workpiece has been removed.
16	UV irradiation has been stopped.	UV irradiation has been stopped.
32	Spinner cleaning has been stopped.	Spinner cleaning has been stopped.
64	Full automation has been stopped and a workpiece is left in the machine.	Full automation has been stopped and a workpiece is left in the machine.
128	Cutting has been normally completed.	Cutting has been normally completed.
256	Inspection reservation has been made or inspection has been performed.	Inspection reservation has been made or inspection has been performed.

Reference: data example

State	Data	
	When the software version of the machine is 2.3 or later	When the software version of the machine is earlier than 2.3
Processing has been normally completed after inspection.	384016020	384015016
There was no workpiece in the cassette slot.	1020	1017

1 – 2. List of Constants

ECID

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4000	InitCommState	52	2	N/A	0	0	2	0=Undefined 1=Enable 2=Disable	Host communication function	GEM Parameter	RO	RO	RO
4001	GEM_Control	51	1	N/A	0	0	3	0=Attempt Online 1=Equipment Offline 2=Host Offline 3=Online	Initial Control State (Made from InitControlState and OfflineSubState)	GEM Parameter	RO	RO	RO
4002	GEM_ESTTM	52	2	sec	15	1	99		Establish communication interval	GEM Parameter	RO	RO	RO
4003	GEM_TO_TC	52	2	sec	30	1	99		Conversation time out	GEM Parameter	RO	RO	RO
4004	GEM_TRANS	52	2	N/A	0	0	32767		Default Transaction ID	HSMS-SS Parameter	RO	RO	RO
4005	GEM_BRATE	52	2	bps	9600	300	9600		Baud Rate	SECS-I Parameter	RO	RO	RO
4006	GEM_DEVID	52	2	N/A	1	0	32767		Device ID	HSMS-SS Parameter	RO	RO	RO
4007	GEM_TO_T1	52	2	ms	500	100	10000		T1 Time out	SECS-I Parameter	RO	RO	RO
4008	GEM_TO_T2	52	2	ms	10000	200	25000		T2 Time out	SECS-I Parameter	RO	RO	RO
4009	GEM_TO_T3	52	2	ms	45	1	120		T3 Time out	SECS-I Parameter	RO	RO	RO
4010	GEM_TO_T4	52	2	ms	45	1	120		T4 Time out	SECS-I Parameter	RO	RO	RO
4011	GEM_TO_T5	52	2	ms	10	1	240		T5 Time out	HSMS-SS Parameter	RO	RO	RO
4012	GEM_TO_T6	52	2	ms	5	1	240		T6 Time out	HSMS-SS Parameter	RO	RO	RO
4013	GEM_TO_T7	52	2	ms	10	1	240		T7 Time out	HSMS-SS Parameter	RO	RO	RO
4014	GEM_TO_T8	52	2	ms	5	1	240		T8 Time out	HSMS-SS Parameter	RO	RO	RO
4015	HSMS_ConnectMode	20	n	N/A	N/A	N/A	N/A	0=Passive 1=Active	Connect Mode	HSMS-SS Parameter	RO	RO	RO
4016	HSMS_RemoteNode_IP	20	n	N/A	N/A	N/A	N/A		Remote node IP address	HSMS-SS Parameter	RO	RO	RO
4017	HSMS_PortNo	54	4	N/A	N/A	N/A	N/A		TCP Port No.	HSMS-SS Parameter	RO	RO	RO
4019	HSMS_RemoteCheck	20	n	N/A	N/A	YES	NO	0=Disable 1=Enable	HSMS Remote check	HSMS-SS Parameter	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4020	MaxSpoolTransmit	54	4	N/A	10	1	999		Max spool transmit	Spooling	RO	RO	RO
4021	OverWriteSpool	11	1	N/A	0	0	1	0=TRUE 1=FALSE	Overwrite Spool	Spooling	RO	RO	RO
4022	SpoolMax	52	2	kB	100	100	99999		Max spool file size	Spooling	RO	RO	RO
4023	Spool	10	1	N/A	0	0	1	0=Not Use 1=Use	Spool Function	Spooling	RO	RO	RO
4024	TimeFormat	10	1	N/A	1	0	1	0=12byte (YYMMDDHHmmss) 1=16byte (YYYYMMDDHHmmsscc)	Time Format	GEM Parameter	RO	RO	RO
4025	MDLN	20	6	N/A	N/A	N/A	N/A		Model Name	Maker Data1	RO	RO	RO
4026	SoftwareRevisionCode	20	6	N/A	N/A	N/A	N/A		Communication Software Revision	Maker Data1	RO	RO	RO
4027	SOFTREV	20	6	N/A	N/A	N/A	N/A		Controle Software Revision	Maker Data1	RO	RO	RO
4029	GEM_RETRY	51	1	Times	3	0	31		Retry Limit	SECS-I Parameter	RO	RO	RO
4030	E87_PASS	20	n	N/A	YES	NO	YES		Function Pass E87	GEM Parameter	RO	RO	RO
4031	IDREAD_PASS	20	n	N/A	YES	NO	YES		Function Pass ID READ E87	GEM Parameter	RO	RO	RO
4032	Bypass_ReadID	11	1	N/A	TRUE	TRUE	FALSE	TRUE=Bypass	ID Read ByPass Flag E87	GEM Parameter	RO	RO	RO
4033	SLOTMAP_PASS	20	n	N/A	YES	NO	YES		Function Pass Slot Mapping E87	GEM Parameter	RO	RO	RO
4040	InitControlState	10	1	N/A	2	1	2	1=OnLine 2=OffLine	Initial Control State	GEM Parameter	RO	RO	RO
4041	OnlineSubState	10	1	N/A	4	4	5	4=Local 5=Remote	Initial Online Sub State	GEM Parameter	RO	RO	RO
4042	OfflineSubState	10	1	N/A	2	1	3	1=Equipment Offline 2=Attempt Online 3=Host Offline	Initial Offline Sub State	GEM Parameter	RO	RO	RO
4043	OnlineFailure	10	1	N/A	1	1	3	1=Equipment Offline 3=Host Offline	State after online failure	GEM Parameter	RO	RO	RO
4044	MAC_NO	20	n	N/A	N/A	N/A	N/A		Manufactured No.	Maker Data1	RO	RO	RO
4045	MAC_ID	20	n	N/A	N/A	N/A	N/A		Machine ID	User Define Data	RO	RW	RW
4100	UNIT_MODE	20	n	N/A	MM	MM	INCH		Default unit	Function Data Maintenance	RO	RW	RW
4101	ALI_PASS	20	n	N/A	YES	NO	YES		Alignment	Function Data Maintenance	RO	RW	RW
4102	CUT_PASS	20	n	N/A	YES	NO	YES		Cut	Function Data Maintenance	RO	RW	RW
4103	CLEAN_PASS	20	n	N/A	YES	NO	YES		Clean	Function Data Maintenance	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4104	SPNDL1_PASS	20	n	N/A	YES	NO	YES		Spindle 1	Function Data Maintenance	RO	RW	RW
4105	SPNDL2_PASS	20	n	N/A	YES	NO	YES		Spindle 2	Function Data Maintenance	RO	RW	RW
4106	DETCT_PASS	20	n	N/A	YES	NO	YES		B.B.D Z1	Function Data Maintenance	RO	RW	RW
4107	DETCT2_PASS	20	n	N/A	YES	NO	YES		B.B.D Z2	Function Data Maintenance	RO	RW	RW
4108	UNSET_PASS	20	n	N/A	YES	NO	YES		Non Contact setup	Function Data Maintenance	RO	RW	RW
4109	FORM_PASS	20	n	N/A	YES	NO	YES		Shape Recognition	Function Data Maintenance	RO	RW	RW
4110	UV_PASS	20	n	N/A	YES	NO	YES		UV lighting system	Function Data Maintenance	RO	RW	RW
4111	BCR_PASS	20	n	N/A	YES	NO	YES		Bar-code reader	Function Data Maintenance	RO	RW	RW
4112	HAN_MODE	20	n	N/A	SAME	SAME	OPEN		Handling seq.	Function Data Maintenance	RO	RW	RW
4113	FRAME_RET	10	l	Times	1	0	9		Frame handling Retry No.	Function Data Maintenance	RO	RW	RW
4115	REJECT_PASS	20	n	N/A	YES	NO	YES		Alignment rejects	Function Data Maintenance	RO	RW	RW
4116	LANG	20	n	N/A	JAPANESE	JAPANESE	S_CHINESE	"JAPANESE" "ENGLISH" "T_CHINESE" "S_CHINESE"	Language	User Define Data	RO	RW	RW
4117	BREAK_MODE	20	n	N/A	STOP	STOP	LOADER_STOP		Fullauto stop mode	User Define Data	RO	RW	RW
4118	FRAME_SIZE	10	l	N/A	0	0	6		Frame select	Function Data Maintenance	RO	RW	RW
4121	FSIZE[1]	20	n	N/A	N/A	N/A	N/A		Frame No.1 Frame Name	Frame Size Register	RO	RW	RW
4122	FSIZE[2]	20	n	N/A	N/A	N/A	N/A		Frame No.2 Frame Name	Frame Size Register	RO	RW	RW
4123	FSIZE[3]	20	n	N/A	N/A	N/A	N/A		Frame No.3 Frame Name	Frame Size Register	RO	RW	RW
4124	FSIZE[4]	20	n	N/A	N/A	N/A	N/A		Frame No.4 Frame Name	Frame Size Register	RO	RW	RW
4125	FSIZE[5]	20	n	N/A	N/A	N/A	N/A		Frame No.5 Frame Name	Frame Size Register	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4126	FSIZE[6]	20	n	N/A	N/A	N/A	N/A		Frame No.6 Frame Name	Frame Size Register	RO	RW	RW
4200	DEV_ID	20	n	N/A	N/A	N/A	N/A		PPID to be used	Device Data	RO	RW	RW
4202	PSPEC_NO	20	n	N/A	N/A	N/A	N/A		Precut spec No.	Device Data	RO	RW	RW
4203	UNIT_DEV	20	n	N/A	N/A	mm	inch		Unit	Device Data	RO	RO	RO
4204	SPNDL_REV	54	4	/min	0	0	60000		Spindle revolution Z1	Device Data	RO	RO	RO
4205	SPNDL_REV2	54	4	/min	0	0	60000		Spindle revolution Z2	Device Data	RO	RO	RO
4210	CUT_MODE[0]	20	n	N/A	N/A	A	SUB_INDE X	"A" "B" "A_UP" "B_ZKEEP" "SUB_INDEX"	Cut mode	Device Data	RO	RW	RW
4211	CUT_MODE[1]	20	n	N/A	N/A	A	B_ZKEEP	"A" "B" "A_UP" "B_ZKEEP"	Cut mode CH1	Sub Index Data	RO	RW	RW
4212	CUT_MODE[2]	20	n	N/A	N/A	A	B_ZKEEP	"A" "B" "A_UP" "B_ZKEEP"	Cut mode CH2	Sub Index Data (CH2)	RO	RW	RW
4213	CUT_MODE[3]	20	n	N/A	N/A	A	B_ZKEEP	"A" "B" "A_UP" "B_ZKEEP"	Cut mode CH3	Sub Index Data (CH3)	RO	RW	RW
4214	CUT_MODE[4]	20	n	N/A	N/A	A	B_ZKEEP	"A" "B" "A_UP" "B_ZKEEP"	Cut mode CH4	Sub Index Data (CH4)	RO	RW	RW
4220	CUT_PROC[0]	20	n	N/A	N/A	Z1	STEP	"Z1" "Z2" "DUAL" "STEP"	Cut method	Device Data	RO	RW	RW
4221	CUT_PROC[1]	20	n	N/A	N/A	Z1	STEP	"Z1" "Z2" "DUAL" "STEP"	Cut method CH1	Sub Index Data	RO	RW	RW
4222	CUT_PROC[2]	20	n	N/A	N/A	Z1	STEP	"Z1" "Z2" "DUAL" "STEP"	Cut method CH2	Sub Index Data (CH2)	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4223	CUT_PROC[3]	20	n	N/A	N/A	Z1	STEP	"Z1" "Z2" "DUAL" "STEP"	Cut method CH3	Sub Index Data (CH3)	RO	RW	RW
4224	CUT_PROC[4]	20	n	N/A	N/A	Z1	STEP	"Z1" "Z2" "DUAL" "STEP"	Cut method CH4	Sub Index Data (CH4)	RO	RW	RW
4230	CUT_PAT	20	n	N/A	N/A	ROUND	SQUARE	"ROUND" "SQUARE"	Work shape	Device Data	RO	RW	RW
4231	WORK_SIZER	54	4	nm	0	0	300000000		Round work size	Device Data	RO	RW	RW
4232	WORK_SIZE1	54	4	nm	0	0	300000000		Square work size CH1	Device Data	RO	RO	RO
4233	WORK_SIZE2	54	4	nm	0	0	300000000		Square work size CH2	Device Data	RO	RW	RW
4234	WORK_THICK	54	4	nm	0	0	10000000		Work thickness	Device Data	RO	RO	RO
4235	TAPE_THICK	54	4	nm	0	0	100000		Tape thickness	Device Data	RO	RO	RO
4236	INDEX_CH1	54	4	nm	0	0	300000000		Index CH1	Device Data	RO	RW	RW
4237	INDEX_CH2	54	4	nm	0	0	300000000		Index CH2	Device Data	RO	RW	RW
4238	CCD_PRESS	20	n	N/A	YES	NO	YES		High-pressure cutting water	Device Data	RO	RW	RW
4239	CLMP_CT	20	n	N/A	YES	NO	YES		C/T frame clamp	Device Data	RO	RW	RW
4240	CH1_HEI[0]	54	4	nm	0	0	5000000		CH1 Height	Device Data	RO	RW	RW
4241	CH1_HEI[1]	54	4	nm	0	0	5000000		CH1 Height No.2	Sub Index Data	RO	RW	RW
4242	CH1_HEI[2]	54	4	nm	0	0	5000000		CH1 Height No.3	Sub Index Data	RO	RW	RW
4243	CH1_HEI[3]	54	4	nm	0	0	5000000		CH1 Height No.4	Sub Index Data	RO	RW	RW
4244	CH1_HEI[4]	54	4	nm	0	0	5000000		CH1 Height No.5	Sub Index Data	RO	RW	RW
4245	CH1_HEI[5]	54	4	nm	0	0	5000000		CH1 Height No.6	Sub Index Data	RO	RW	RW
4246	CH1_HEI[6]	54	4	nm	0	0	5000000		CH1 Height No.7	Sub Index Data	RO	RW	RW
4247	CH1_HEI[7]	54	4	nm	0	0	5000000		CH1 Height No.8	Sub Index Data	RO	RW	RW
4250	CH2_HEI[0]	54	4	nm	0	0	5000000		CH2 Height No.1	Sub Index Data (CH2)	RO	RW	RW
4251	CH2_HEI[1]	54	4	nm	0	0	5000000		CH2 Height No.2	Sub Index Data (CH2)	RO	RW	RW
4252	CH2_HEI[2]	54	4	nm	0	0	5000000		CH2 Height No.3	Sub Index Data (CH2)	RO	RW	RW
4253	CH2_HEI[3]	54	4	nm	0	0	5000000		CH2 Height No.4	Sub Index Data (CH2)	RO	RW	RW
4254	CH2_HEI[4]	54	4	nm	0	0	5000000		CH2 Height No.5	Sub Index Data (CH2)	RO	RW	RW
4255	CH2_HEI[5]	54	4	nm	0	0	5000000		CH2 Height No.6	Sub Index Data (CH2)	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4256	CH2_HEI[6]	54	4	nm	0	0	5000000		CH2 Height No.7	Sub Index Data (CH2)	RO	RW	RW
4257	CH2_HEI[7]	54	4	nm	0	0	5000000		CH2 Height No.8	Sub Index Data (CH2)	RO	RW	RW
4260	CH3_HEI[0]	54	4	nm	0	0	5000000		CH3 Height No.1	Sub Index Data (CH3)	RO	RW	RW
4261	CH3_HEI[1]	54	4	nm	0	0	5000000		CH3 Height No.2	Sub Index Data (CH3)	RO	RW	RW
4262	CH3_HEI[2]	54	4	nm	0	0	5000000		CH3 Height No.3	Sub Index Data (CH3)	RO	RW	RW
4263	CH3_HEI[3]	54	4	nm	0	0	5000000		CH3 Height No.4	Sub Index Data (CH3)	RO	RW	RW
4264	CH3_HEI[4]	54	4	nm	0	0	5000000		CH3 Height No.5	Sub Index Data (CH3)	RO	RW	RW
4265	CH3_HEI[5]	54	4	nm	0	0	5000000		CH3 Height No.6	Sub Index Data (CH3)	RO	RW	RW
4266	CH3_HEI[6]	54	4	nm	0	0	5000000		CH3 Height No.7	Sub Index Data (CH3)	RO	RW	RW
4267	CH3_HEI[7]	54	4	nm	0	0	5000000		CH3 Height No.8	Sub Index Data (CH3)	RO	RW	RW
4270	CH4_HEI[0]	54	4	nm	0	0	5000000		CH4 Height No.1	Sub Index Data (CH4)	RO	RW	RW
4271	CH4_HEI[1]	54	4	nm	0	0	5000000		CH4 Height No.2	Sub Index Data (CH4)	RO	RW	RW
4272	CH4_HEI[2]	54	4	nm	0	0	5000000		CH4 Height No.3	Sub Index Data (CH4)	RO	RW	RW
4273	CH4_HEI[3]	54	4	nm	0	0	5000000		CH4 Height No.4	Sub Index Data (CH4)	RO	RW	RW
4274	CH4_HEI[4]	54	4	nm	0	0	5000000		CH4 Height No.5	Sub Index Data (CH4)	RO	RW	RW
4275	CH4_HEI[5]	54	4	nm	0	0	5000000		CH4 Height No.6	Sub Index Data (CH4)	RO	RW	RW
4276	CH4_HEI[6]	54	4	nm	0	0	5000000		CH4 Height No.7	Sub Index Data (CH4)	RO	RW	RW
4277	CH4_HEI[7]	54	4	nm	0	0	5000000		CH4 Height No.8	Sub Index Data (CH4)	RO	RW	RW
4280	CH1_SPD[0]	54	4	nm/sec	0	0	600000000		CH1 Feed Speed	Device Data	RO	RW	RW
4281	CH1_SPD[1]	54	4	nm/sec	0	0	600000000		CH1 Feed Speed No.2	Sub Index Data	RO	RW	RW
4282	CH1_SPD[2]	54	4	nm/sec	0	0	600000000		CH1 Feed Speed No.3	Sub Index Data	RO	RW	RW
4283	CH1_SPD[3]	54	4	nm/sec	0	0	600000000		CH1 Feed Speed No.4	Sub Index Data	RO	RW	RW
4284	CH1_SPD[4]	54	4	nm/sec	0	0	600000000		CH1 Feed Speed No.5	Sub Index Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4285	CH1_SPD[5]	54	4	nm/sec	0	0	600000000		CH1 Feed Speed No.6	Sub Index Data	RO	RW	RW
4286	CH1_SPD[6]	54	4	nm/sec	0	0	600000000		CH1 Feed Speed No.7	Sub Index Data	RO	RW	RW
4287	CH1_SPD[7]	54	4	nm/sec	0	0	600000000		CH1 Feed Speed No.8	Sub Index Data	RO	RW	RW
4290	CH2_SPD[0]	54	4	nm/sec	0	0	600000000		CH2 Feed Speed	Sub Index Data (CH2)	RO	RW	RW
4291	CH2_SPD[1]	54	4	nm/sec	0	0	600000000		CH2 Feed Speed No.2	Sub Index Data (CH2)	RO	RW	RW
4292	CH2_SPD[2]	54	4	nm/sec	0	0	600000000		CH2 Feed Speed No.3	Sub Index Data (CH2)	RO	RW	RW
4293	CH2_SPD[3]	54	4	nm/sec	0	0	600000000		CH2 Feed Speed No.4	Sub Index Data (CH2)	RO	RW	RW
4294	CH2_SPD[4]	54	4	nm/sec	0	0	600000000		CH2 Feed Speed No.5	Sub Index Data (CH2)	RO	RW	RW
4295	CH2_SPD[5]	54	4	nm/sec	0	0	600000000		CH2 Feed Speed No.6	Sub Index Data (CH2)	RO	RW	RW
4296	CH2_SPD[6]	54	4	nm/sec	0	0	600000000		CH2 Feed Speed No.7	Sub Index Data (CH2)	RO	RW	RW
4297	CH2_SPD[7]	54	4	nm/sec	0	0	600000000		CH2 Feed Speed No.8	Sub Index Data (CH2)	RO	RW	RW
4300	CH3_SPD[0]	54	4	nm/sec	0	0	600000000		CH3 Feed Speed No.1	Sub Index Data (CH3)	RO	RW	RW
4301	CH3_SPD[1]	54	4	nm/sec	0	0	600000000		CH3 Feed Speed No.2	Sub Index Data (CH3)	RO	RW	RW
4302	CH3_SPD[2]	54	4	nm/sec	0	0	600000000		CH3 Feed Speed No.3	Sub Index Data (CH3)	RO	RW	RW
4303	CH3_SPD[3]	54	4	nm/sec	0	0	600000000		CH3 Feed Speed No.4	Sub Index Data (CH3)	RO	RW	RW
4304	CH3_SPD[4]	54	4	nm/sec	0	0	600000000		CH3 Feed Speed No.5	Sub Index Data (CH3)	RO	RW	RW
4305	CH3_SPD[5]	54	4	nm/sec	0	0	600000000		CH3 Feed Speed No.6	Sub Index Data (CH3)	RO	RW	RW
4306	CH3_SPD[6]	54	4	nm/sec	0	0	600000000		CH3 Feed Speed No.7	Sub Index Data (CH3)	RO	RW	RW
4307	CH3_SPD[7]	54	4	nm/sec	0	0	600000000		CH3 Feed Speed No.8	Sub Index Data (CH3)	RO	RW	RW
4310	CH4_SPD[0]	54	4	nm/sec	0	0	600000000		CH4 Feed Speed No.1	Sub Index Data (CH4)	RO	RW	RW
4311	CH4_SPD[1]	54	4	nm/sec	0	0	600000000		CH4 Feed Speed No.2	Sub Index Data (CH4)	RO	RW	RW
4312	CH4_SPD[2]	54	4	nm/sec	0	0	600000000		CH4 Feed Speed No.3	Sub Index Data (CH4)	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4313	CH4_SPD[3]	54	4	nm/sec	0	0	600000000		CH4 Feed Speed No.4	Sub Index Data (CH4)	RO	RW	RW
4314	CH4_SPD[4]	54	4	nm/sec	0	0	600000000		CH4 Feed Speed No.5	Sub Index Data (CH4)	RO	RW	RW
4315	CH4_SPD[5]	54	4	nm/sec	0	0	600000000		CH4 Feed Speed No.6	Sub Index Data (CH4)	RO	RW	RW
4316	CH4_SPD[6]	54	4	nm/sec	0	0	600000000		CH4 Feed Speed No.7	Sub Index Data (CH4)	RO	RW	RW
4317	CH4_SPD[7]	54	4	nm/sec	0	0	600000000		CH4 Feed Speed No.8	Sub Index Data (CH4)	RO	RW	RW
4320	CH1_IDX[0]	54	4	nm	0	0	300000000		CH1 Y-index No.1	Sub Index Data	RO	RO	RO
4321	CH1_IDX[1]	54	4	nm	0	0	300000000		CH1 Y-index No.2	Sub Index Data	RO	RO	RO
4322	CH1_IDX[2]	54	4	nm	0	0	300000000		CH1 Y-index No.3	Sub Index Data	RO	RO	RO
4323	CH1_IDX[3]	54	4	nm	0	0	300000000		CH1 Y-index No.4	Sub Index Data	RO	RO	RO
4324	CH1_IDX[4]	54	4	nm	0	0	300000000		CH1 Y-index No.5	Sub Index Data	RO	RO	RO
4325	CH1_IDX[5]	54	4	nm	0	0	300000000		CH1 Y-index No.6	Sub Index Data	RO	RO	RO
4326	CH1_IDX[6]	54	4	nm	0	0	300000000		CH1 Y-index No.7	Sub Index Data	RO	RO	RO
4327	CH1_IDX[7]	54	4	nm	0	0	300000000		CH1 Y-index No.8	Sub Index Data	RO	RO	RO
4330	CH1_IDX2[0]	54	4	nm	0	0	300000000		CH1 Y1-Y2 No.1	Sub Index Data	RO	RO	RO
4331	CH1_IDX2[1]	54	4	nm	0	0	300000000		CH1 Y1-Y2 No.2	Sub Index Data	RO	RO	RO
4332	CH1_IDX2[2]	54	4	nm	0	0	300000000		CH1 Y1-Y2 No.3	Sub Index Data	RO	RO	RO
4333	CH1_IDX2[3]	54	4	nm	0	0	300000000		CH1 Y1-Y2 No.4	Sub Index Data	RO	RO	RO
4334	CH1_IDX2[4]	54	4	nm	0	0	300000000		CH1 Y1-Y2 No.5	Sub Index Data	RO	RO	RO
4335	CH1_IDX2[5]	54	4	nm	0	0	300000000		CH1 Y1-Y2 No.6	Sub Index Data	RO	RO	RO
4336	CH1_IDX2[6]	54	4	nm	0	0	300000000		CH1 Y1-Y2 No.7	Sub Index Data	RO	RO	RO
4337	CH1_IDX2[7]	54	4	nm	0	0	300000000		CH1 Y1-Y2 No.8	Sub Index Data	RO	RO	RO
4340	CH2_IDX[0]	54	4	nm	0	0	300000000		CH2 Y-index No.1	Sub Index Data (CH2)	RO	RW	RW
4341	CH2_IDX[1]	54	4	nm	0	0	300000000		CH2 Y-index No.2	Sub Index Data (CH2)	RO	RW	RW
4342	CH2_IDX[2]	54	4	nm	0	0	300000000		CH2 Y-index No.3	Sub Index Data (CH2)	RO	RW	RW
4343	CH2_IDX[3]	54	4	nm	0	0	300000000		CH2 Y-index No.4	Sub Index Data (CH2)	RO	RW	RW
4344	CH2_IDX[4]	54	4	nm	0	0	300000000		CH2 Y-index No.5	Sub Index Data (CH2)	RO	RW	RW
4345	CH2_IDX[5]	54	4	nm	0	0	300000000		CH2 Y-index No.6	Sub Index Data (CH2)	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4346	CH2_IDX[6]	54	4	nm	0	0	300000000		CH2 Y-index No.7	Sub Index Data (CH2)	RO	RW	RW
4347	CH2_IDX[7]	54	4	nm	0	0	300000000		CH2 Y-index No.8	Sub Index Data (CH2)	RO	RW	RW
4350	CH2_IDX2[0]	54	4	nm	0	0	300000000		CH2 Y1-Y2 No.1	Sub Index Data (CH2)	RO	RO	RO
4351	CH2_IDX2[1]	54	4	nm	0	0	300000000		CH2 Y1-Y2 No.2	Sub Index Data (CH2)	RO	RO	RO
4352	CH2_IDX2[2]	54	4	nm	0	0	300000000		CH2 Y1-Y2 No.3	Sub Index Data (CH2)	RO	RO	RO
4353	CH2_IDX2[3]	54	4	nm	0	0	300000000		CH2 Y1-Y2 No.4	Sub Index Data (CH2)	RO	RO	RO
4354	CH2_IDX2[4]	54	4	nm	0	0	300000000		CH2 Y1-Y2 No.5	Sub Index Data (CH2)	RO	RO	RO
4355	CH2_IDX2[5]	54	4	nm	0	0	300000000		CH2 Y1-Y2 No.6	Sub Index Data (CH2)	RO	RO	RO
4356	CH2_IDX2[6]	54	4	nm	0	0	300000000		CH2 Y1-Y2 No.7	Sub Index Data (CH2)	RO	RO	RO
4357	CH2_IDX2[7]	54	4	nm	0	0	300000000		CH2 Y1-Y2 No.8	Sub Index Data (CH2)	RO	RO	RO
4360	CH3_IDX[0]	54	4	nm	0	0	300000000		CH3 Y-index No.1	Sub Index Data (CH3)	RO	RW	RW
4361	CH3_IDX[1]	54	4	nm	0	0	300000000		CH3 Y-index No.2	Sub Index Data (CH3)	RO	RW	RW
4362	CH3_IDX[2]	54	4	nm	0	0	300000000		CH3 Y-index No.3	Sub Index Data (CH3)	RO	RW	RW
4363	CH3_IDX[3]	54	4	nm	0	0	300000000		CH3 Y-index No.4	Sub Index Data (CH3)	RO	RW	RW
4364	CH3_IDX[4]	54	4	nm	0	0	300000000		CH3 Y-index No.5	Sub Index Data (CH3)	RO	RW	RW
4365	CH3_IDX[5]	54	4	nm	0	0	300000000		CH3 Y-index No.6	Sub Index Data (CH3)	RO	RW	RW
4366	CH3_IDX[6]	54	4	nm	0	0	300000000		CH3 Y-index No.7	Sub Index Data (CH3)	RO	RW	RW
4367	CH3_IDX[7]	54	4	nm	0	0	300000000		CH3 Y-index No.8	Sub Index Data (CH3)	RO	RW	RW
4370	CH3_IDX2[0]	54	4	nm	0	0	300000000		CH3 Y1-Y2 No.1	Sub Index Data (CH3)	RO	RO	RO
4371	CH3_IDX2[1]	54	4	nm	0	0	300000000		CH3 Y1-Y2 No.2	Sub Index Data (CH3)	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4372	CH3_IDX2[2]	54	4	nm	0	0	300000000		CH3 Y1-Y2 No.3	Sub Index Data (CH3)	RO	RO	RO
4373	CH3_IDX2[3]	54	4	nm	0	0	300000000		CH3 Y1-Y2 No.4	Sub Index Data (CH3)	RO	RO	RO
4374	CH3_IDX2[4]	54	4	nm	0	0	300000000		CH3 Y1-Y2 No.5	Sub Index Data (CH3)	RO	RO	RO
4375	CH3_IDX2[5]	54	4	nm	0	0	300000000		CH3 Y1-Y2 No.6	Sub Index Data (CH3)	RO	RO	RO
4376	CH3_IDX2[6]	54	4	nm	0	0	300000000		CH3 Y1-Y2 No.7	Sub Index Data (CH3)	RO	RO	RO
4377	CH3_IDX2[7]	54	4	nm	0	0	300000000		CH3 Y1-Y2 No.8	Sub Index Data (CH3)	RO	RO	RO
4380	CH4_IDX[0]	54	4	nm	0	0	300000000		CH4 Y-index No.1	Sub Index Data (CH4)	RO	RW	RW
4381	CH4_IDX[1]	54	4	nm	0	0	300000000		CH4 Y-index No.2	Sub Index Data (CH4)	RO	RW	RW
4382	CH4_IDX[2]	54	4	nm	0	0	300000000		CH4 Y-index No.3	Sub Index Data (CH4)	RO	RW	RW
4383	CH4_IDX[3]	54	4	nm	0	0	300000000		CH4 Y-index No.4	Sub Index Data (CH4)	RO	RW	RW
4384	CH4_IDX[4]	54	4	nm	0	0	300000000		CH4 Y-index No.5	Sub Index Data (CH4)	RO	RW	RW
4385	CH4_IDX[5]	54	4	nm	0	0	300000000		CH4 Y-index No.6	Sub Index Data (CH4)	RO	RW	RW
4386	CH4_IDX[6]	54	4	nm	0	0	300000000		CH4 Y-index No.7	Sub Index Data (CH4)	RO	RW	RW
4387	CH4_IDX[7]	54	4	nm	0	0	300000000		CH4 Y-index No.8	Sub Index Data (CH4)	RO	RW	RW
4390	CH4_IDX2[0]	54	4	nm	0	0	300000000		CH4 Y1-Y2 No.1	Sub Index Data (CH4)	RO	RO	RO
4391	CH4_IDX2[1]	54	4	nm	0	0	300000000		CH4 Y1-Y2 No.2	Sub Index Data (CH4)	RO	RO	RO
4392	CH4_IDX2[2]	54	4	nm	0	0	300000000		CH4 Y1-Y2 No.3	Sub Index Data (CH4)	RO	RO	RO
4393	CH4_IDX2[3]	54	4	nm	0	0	300000000		CH4 Y1-Y2 No.4	Sub Index Data (CH4)	RO	RO	RO
4394	CH4_IDX2[4]	54	4	nm	0	0	300000000		CH4 Y1-Y2 No.5	Sub Index Data (CH4)	RO	RO	RO
4395	CH4_IDX2[5]	54	4	nm	0	0	300000000		CH4 Y1-Y2 No.6	Sub Index Data (CH4)	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4396	CH4_IDX2[6]	54	4	nm	0	0	300000000		CH4 Y1-Y2 No.7	Sub Index Data (CH4)	RO	RO	RO
4397	CH4_IDX2[7]	54	4	nm	0	0	300000000		CH4 Y1-Y2 No.8	Sub Index Data (CH4)	RO	RO	RO
4400	CH1_REP[0]	54	4	N/A	0	0	999		CH1 Times No.1	Sub Index Data	RO	RW	RW
4401	CH1_REP[1]	54	4	N/A	0	0	999		CH1 Times No.2	Sub Index Data	RO	RW	RW
4402	CH1_REP[2]	54	4	N/A	0	0	999		CH1 Times No.3	Sub Index Data	RO	RW	RW
4403	CH1_REP[3]	54	4	N/A	0	0	999		CH1 Times No.4	Sub Index Data	RO	RW	RW
4404	CH1_REP[4]	54	4	N/A	0	0	999		CH1 Times No.5	Sub Index Data	RO	RW	RW
4405	CH1_REP[5]	54	4	N/A	0	0	999		CH1 Times No.6	Sub Index Data	RO	RW	RW
4406	CH1_REP[6]	54	4	N/A	0	0	999		CH1 Times No.7	Sub Index Data	RO	RW	RW
4407	CH1_REP[7]	54	4	N/A	0	0	999		CH1 Times No.8	Sub Index Data	RO	RW	RW
4410	CH2_REP[0]	54	4	N/A	0	0	999		CH2 Times No.1	Sub Index Data (CH2)	RO	RW	RW
4411	CH2_REP[1]	54	4	N/A	0	0	999		CH2 Times No.2	Sub Index Data (CH2)	RO	RW	RW
4412	CH2_REP[2]	54	4	N/A	0	0	999		CH2 Times No.3	Sub Index Data (CH2)	RO	RW	RW
4413	CH2_REP[3]	54	4	N/A	0	0	999		CH2 Times No.4	Sub Index Data (CH2)	RO	RW	RW
4414	CH2_REP[4]	54	4	N/A	0	0	999		CH2 Times No.5	Sub Index Data (CH2)	RO	RW	RW
4415	CH2_REP[5]	54	4	N/A	0	0	999		CH2 Times No.6	Sub Index Data (CH2)	RO	RW	RW
4416	CH2_REP[6]	54	4	N/A	0	0	999		CH2 Times No.7	Sub Index Data (CH2)	RO	RW	RW
4417	CH2_REP[7]	54	4	N/A	0	0	999		CH2 Times No.8	Sub Index Data (CH2)	RO	RW	RW
4420	CH3_REP[0]	54	4	N/A	0	0	999		CH3 Times No.1	Sub Index Data (CH3)	RO	RW	RW
4421	CH3_REP[1]	54	4	N/A	0	0	999		CH3 Times No.2	Sub Index Data (CH3)	RO	RW	RW
4422	CH3_REP[2]	54	4	N/A	0	0	999		CH3 Times No.3	Sub Index Data (CH3)	RO	RW	RW
4423	CH3_REP[3]	54	4	N/A	0	0	999		CH3 Times No.4	Sub Index Data (CH3)	RO	RW	RW
4424	CH3_REP[4]	54	4	N/A	0	0	999		CH3 Times No.5	Sub Index Data (CH3)	RO	RW	RW
4425	CH3_REP[5]	54	4	N/A	0	0	999		CH3 Times No.6	Sub Index Data (CH3)	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4426	CH3_REP[6]	54	4	N/A	0	0	999		CH3 Times No.7	Sub Index Data (CH3)	RO	RW	RW
4427	CH3_REP[7]	54	4	N/A	0	0	999		CH3 Times No.8	Sub Index Data (CH3)	RO	RW	RW
4430	CH4_REP[0]	54	4	N/A	0	0	999		CH4 Times No.1	Sub Index Data (CH4)	RO	RW	RW
4431	CH4_REP[1]	54	4	N/A	0	0	999		CH4 Times No.2	Sub Index Data (CH4)	RO	RW	RW
4432	CH4_REP[2]	54	4	N/A	0	0	999		CH4 Times No.3	Sub Index Data (CH4)	RO	RW	RW
4433	CH4_REP[3]	54	4	N/A	0	0	999		CH4 Times No.4	Sub Index Data (CH4)	RO	RW	RW
4434	CH4_REP[4]	54	4	N/A	0	0	999		CH4 Times No.5	Sub Index Data (CH4)	RO	RW	RW
4435	CH4_REP[5]	54	4	N/A	0	0	999		CH4 Times No.6	Sub Index Data (CH4)	RO	RW	RW
4436	CH4_REP[6]	54	4	N/A	0	0	999		CH4 Times No.7	Sub Index Data (CH4)	RO	RW	RW
4437	CH4_REP[7]	54	4	N/A	0	0	999		CH4 Times No.8	Sub Index Data (CH4)	RO	RW	RW
4441	POST_CH[1]	34	4	10^-6deg	0	-50000000	280000000		CH1 Theta angle	Sub Index Data	RO	RW	RW
4442	POST_CH[2]	34	4	10^-6deg	0	-50000000	280000000		CH2 Theta angle	Sub Index Data (CH2)	RO	RW	RW
4443	POST_CH[3]	34	4	10^-6deg	0	-50000000	280000000		CH3 Theta angle	Sub Index Data (CH3)	RO	RW	RW
4444	POST_CH[4]	34	4	10^-6deg	0	-50000000	280000000		CH4 Theta angle	Sub Index Data (CH4)	RO	RW	RW
4451	DIR_CH[1]	20	n	N/A	FRONT	REAR	FRONT		CH1 Cut Direction	Sub Index Data	RO	RW	RW
4452	DIR_CH[2]	20	n	N/A	FRONT	REAR	FRONT		CH2 Cut Direction	Sub Index Data (CH2)	RO	RW	RW
4453	DIR_CH[3]	20	n	N/A	FRONT	REAR	FRONT		CH3 Cut Direction	Sub Index Data (CH3)	RO	RW	RW
4454	DIR_CH[4]	20	n	N/A	FRONT	REAR	FRONT		CH4 Cut Direction	Sub Index Data (CH4)	RO	RW	RW
4460	CUT_CH	20	n	N/A	N/A	N/A	N/A	"12" "21" "1234", etc.	Cutting ch seq.	Sub Index Data	RO	RW	RW
4471	ALIGN_CH[1]	34	4	nm	0	-999999900	999999900		Align CH1	Sub Index Data	RO	RW	RW
4472	ALIGN_CH[2]	34	4	nm	0	-999999900	999999900		Align CH2	Sub Index Data (CH2)	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4473	ALIGN_CH[3]	34	4	nm	0	-999999900	999999900		Align CH3	Sub Index Data (CH3)	RO	RW	RW
4474	ALIGN_CH[4]	34	4	nm	0	-999999900	999999900		Align CH4	Sub Index Data (CH4)	RO	RW	RW
4481	SKIP_F_CH[1]	34	4	nm	0	-99999999	99999999		Noncut area (F) CH1	Sub Index Data	RO	RW	RW
4482	SKIP_F_CH[2]	34	4	nm	0	-99999999	99999999		Noncut area (F) CH2	Sub Index Data (CH2)	RO	RW	RW
4483	SKIP_F_CH[3]	34	4	nm	0	-99999999	99999999		Noncut area (F) CH3	Sub Index Data (CH3)	RO	RW	RW
4484	SKIP_F_CH[4]	34	4	nm	0	-99999999	99999999		Noncut area (F) CH4	Sub Index Data (CH4)	RO	RW	RW
4491	SKIP_R_CH[1]	34	4	nm	0	-99999999	99999999		Noncut area (R) CH1	Sub Index Data	RO	RW	RW
4492	SKIP_R_CH[2]	34	4	nm	0	-99999999	99999999		Noncut area (R) CH2	Sub Index Data (CH2)	RO	RW	RW
4493	SKIP_R_CH[3]	34	4	nm	0	-99999999	99999999		Noncut area (R) CH3	Sub Index Data (CH3)	RO	RW	RW
4494	SKIP_R_CH[4]	34	4	nm	0	-99999999	99999999		Noncut area (R) CH4	Sub Index Data (CH4)	RO	RW	RW
4501	TOTAL_LINE[1]	34	4	N/A	0	0	9999		Cut lines CH1	Sub Index Data	RO	RW	RW
4502	TOTAL_LINE[2]	34	4	N/A	0	0	9999		Cut lines CH2	Sub Index Data (CH2)	RO	RW	RW
4503	TOTAL_LINE[3]	34	4	N/A	0	0	9999		Cut lines CH3	Sub Index Data (CH3)	RO	RW	RW
4504	TOTAL_LINE[4]	34	4	N/A	0	0	9999		Cut lines CH4	Sub Index Data (CH4)	RO	RW	RW
4510	AUTODOWN_L	34	4	um	0	0	99999999		Auto down spec length Z1	Device Data	RO	RW	RW
4511	AUTODOWN_L2	34	4	um	0	0	99999999		Auto down spec length Z2	Device Data	RO	RW	RW
4512	AUTODOWN_Z	34	4	nm	0	0	40000000		Auto down length Z1	Device Data	RO	RW	RW
4513	AUTODOWN_Z2	34	4	nm	0	0	40000000		Auto down length Z2	Device Data	RO	RW	RW
4514	WATER_SPDX	34	4	nm/sec	0	10000000	400000000		Air curtain sweep speed	Device Data	RO	RO	RO
4520	SETUP_LEN	34	4	mm	0	0	99999999		Auto Setup Interval (length) Z1	Device Data	RO	RW	RW
4521	SETUP_COU	34	4	N/A	0	0	99999		Auto Setup Interval (lines) Z1	Device Data	RO	RW	RW
4522	SETUP_LEN2	34	4	mm	0	0	99999999		Auto Setup Interval (length) Z2	Device Data	RO	RW	RW
4523	SETUP_COU2	34	4	N/A	0	0	99999		Auto Setup Interval (lines) Z2	Device Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4524	SETUP_AUTO	20	n	N/A	N/A	NO	BEFORE	"NO" "YES" "BEFORE"	Auto setup during cutting	Device Data	RO	RW	RW
4525	SETUP_WITH	20	n	N/A	NO	NO	Z1	"NO" "Z1" "Z2"	Auto setup synchronization	Device Data	RO	RW	RW
4530	ALI_MODE	20	n	N/A	NORMAL	NORMAL	SPECIAL	"NORMAL" "SPECIAL"	Alignment mode	Alignment Data	RO	RW	RW
4531	ALI_PATRN	20	n	N/A	A	A	ABMacro	"A" "B" "AandB" "AorB" "ABMacro"	Alignment pattern	Alignment Data	RO	RW	RW
4532	ALU_TIM_LIM	34	4	sec	0	0	999		Time out	Alignment Data	RO	RW	RW
4533	ALU_RETRY	34	4	times	0	0	9		Retry count	Alignment Data	RO	RW	RW
4534	ALU_PERCENT	34	4	%	0	0	100		θ adjust stroke	Alignment Data	RO	RW	RW
4535	ALU_LIM_Y	34	4	nm	0	0	99999900		Y adjust permission	Alignment Data	RO	RW	RW
4536	ALU_LIM_T	34	4	nm	0	0	99999900		θ adjust permission	Alignment Data	RO	RW	RW
4537	IDX_CHK_X	34	4	chips	0	0	99		Index check X position	Alignment Data	RO	RW	RW
4538	IDX_CHK_Y	34	4	chips	0	0	99		Index check Y position	Alignment Data	RO	RW	RW
4539	IDX_PER_Y	34	4	nm	0	0	99999900		Index check Y permission	Alignment Data	RO	RW	RW
4540	ALI_ESC_ADJ	20	n	N/A	YES	NO	YES		Escape data auto adjust	Alignment Data	RO	RW	RW
4550	ALU_Q_CH[0]	34	4	%	0	0	100		Q-level Macro	Alignment Data	RO	RW	RW
4551	ALU_Q_CH[1]	34	4	%	0	0	100		Q-level CH1	Alignment Data	RO	RW	RW
4552	ALU_Q_CH[2]	34	4	%	0	0	100		Q-level CH2	Alignment Data	RO	RW	RW
4553	ALU_Q_CH[3]	34	4	%	0	0	100		Q-level CH3	Alignment Data	RO	RW	RW
4554	ALU_Q_CH[4]	34	4	%	0	0	100		Q-level CH4	Alignment Data	RO	RW	RW
4561	HAIR_W_CH[1]	34	4	Pixel	0	0	512		Hairline width CH1	Alignment Data	RO	RW	RW
4562	HAIR_W_CH[2]	34	4	Pixel	0	0	512		Hairline width CH2	Alignment Data	RO	RW	RW
4563	HAIR_W_CH[3]	34	4	Pixel	0	0	512		Hairline width CH3	Alignment Data	RO	RW	RW
4564	HAIR_W_CH[4]	34	4	Pixel	0	0	512		Hairline width CH4	Alignment Data	RO	RW	RW
4571	ALU_ADJ_CH[1]	34	4	nm	0	0	99999990		Street adjust CH1	Alignment Data	RO	RW	RW
4572	ALU_ADJ_CH[2]	34	4	nm	0	0	99999990		Street adjust CH2	Alignment Data	RO	RW	RW
4573	ALU_ADJ_CH[3]	34	4	nm	0	0	99999990		Street adjust CH3	Alignment Data	RO	RW	RW
4574	ALU_ADJ_CH[4]	34	4	nm	0	0	99999990		Street adjust CH4	Alignment Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4580	FOCUS_TIME	20	n	N/A	N/A	MAC	BY_DEVICE	"BY_DEVICE" "MAC" "MIC" "MAC_MIC" "BY_POINT"	Focus timing	Alignment Data	RO	RW	RW
4581	FOCUS_MODE	20	n	N/A	N/A	WORK	FULL	"WORK" "SHORT" "FULL"	Focus mode	Alignment Data	RO	RW	RW
4582	FOCUS_STROK	34	4	nm	0	0	5000000		Focus stroke	Alignment Data	RO	RW	RW
4583	FOCUS_STEP	34	4	nm	0	0	FOCUS_STROK		Focus step	Alignment Data	RO	RW	RW
4584	FOCUS_DIS	34	4	nm	0	0	999900000		By point distance	Alignment Data	RO	RW	RW
4585	FOCUS_DIR	34	4	%	0	0	100		Auto focus light level Dir	Alignment Special Data	RO	RW	RW
4586	FOCUS_OBL	34	4	%	0	0	100		Auto focus light level Obl	Alignment Special Data	RO	RW	RW
4587	ANGLE_DIR	34	4	%	0	0	100		Angle light level Dir	Alignment Special Data	RO	RW	RW
4588	ANGLE_OBL	34	4	%	0	0	100		Angle light level Obl	Alignment Special Data	RO	RW	RW
4589	FOCUS_WX	34	4	Pixel	0	0	512		Auto focus area X	Alignment Special Data	RO	RW	RW
4590	FOCUS_WY	34	4	Pixel	0	0	480		Auto focus area Y	Alignment Special Data	RO	RW	RW
4591	KC_LINE_L	34	4	lines	0	0	9999		Check frequency (every)(lines)	Kerf Check Data	RO	RW	RW
4601	KC_LINE_M[1]	34	4	lines	0	0	9999		Check freq. within a wafer (lines) 1st CH1	Kerf Check Data	RO	RW	RW
4602	KC_LINE_M[2]	34	4	lines	0	0	9999		Check freq. within a wafer (lines) 1st CH2	Kerf Check Data	RO	RW	RW
4603	KC_LINE_M[3]	34	4	lines	0	0	9999		Check freq. within a wafer (lines) 1st CH3	Kerf Check Data	RO	RW	RW
4604	KC_LINE_M[4]	34	4	lines	0	0	9999		Check freq. within a wafer (lines) 1st CH4	Kerf Check Data	RO	RW	RW
4611	KC_LINE_N[1]	34	4	lines	0	0	9999		Check freq. within a wafer (lines) Every CH1	Kerf Check Data	RO	RW	RW
4612	KC_LINE_N[2]	34	4	lines	0	0	9999		Check freq. within a wafer (lines) Every CH2	Kerf Check Data	RO	RW	RW
4613	KC_LINE_N[3]	34	4	lines	0	0	9999		Check freq. within a wafer (lines) Every CH3	Kerf Check Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4614	KC_LINE_N[4]	34	4	lines	0	0	9999		Check freq. within a wafer (lines) Every CH4	Kerf Check Data	RO	RW	RW
4620	KC_WORK_NO	34	4	N/A	0	0	999		Check frequency (every)(workpiece)	Kerf Check Data	RO	RW	RW
4621	KC_MODE	20	n	N/A	KERF_TARGET	KERF	KERF_TARGET	"OPERATOR" "KERF" "TARGET" "KERF_TARGET"	Check method	Kerf Check Data	RO	RW	RW
4622	KC_OBJECT	20	n	N/A	CENTER	LOWER	CENTER	"CENTER" "UPPER" "LOWER"	Check object	Kerf Check Data2	RO	RO	RO
4623	KC_WIDTH	34	4	N/A	1	1	9		Window width	Kerf Check Data2	RO	RO	RO
4624	KC_SENSE[0]	34	4	N/A	0	0	3		Sensitivity	Kerf Check Data2	RO	RO	RO
4625	KC_PNT_LIM	34	4	%	0	0	99		Kerf score permission Z1	Kerf Check Data	RO	RO	RO
4626	KC2PNT_LIM	34	4	%	0	0	99		Kerf score permission Z2	Kerf Check Data	RO	RW	RW
4627	KC_PNT_ERR	20	n	N/A	CALL	CALL	SKIP	"CALL" "SKIP"	Error countermeasure (Kerf score)	Kerf Check Data	RO	RW	RW
4628	KC_OFF_LIM	34	4	nm	0	0	999999000		Off center operator call permission Z1	Kerf Check Data	RO	RW	RW
4629	KC2OFF_LIM	34	4	nm	0	0	999999000		Off center operator call permission Z2	Kerf Check Data	RO	RW	RW
4630	KC_OFF_ADJ	34	4	nm	0	0	999999000		Off center auto adjust permission Z1	Kerf Check Data	RO	RW	RW
4631	KC2OFF_ADJ	34	4	nm	0	0	999999000		Off center auto adjust permission Z2	Kerf Check Data	RO	RW	RW
4632	KC_MAX_LIM	34	4	nm	0	0	999999000		Kerf width (without chipping) Max Z1	Kerf Check Data	RO	RW	RW
4633	KC2MAX_LIM	34	4	nm	0	0	999999000		Kerf width (without chipping) Max Z2	Kerf Check Data	RO	RW	RW
4634	KC_MAX_ERR	20	n	N/A	CALL	CALL	RETRY	"CALL" "PRECUT" "RETRY"	Error countermeasure (Kerf width (without chipping) Max)	Kerf Check Data	RO	RW	RW
4635	KC_MIN_LIM	34	4	nm	0	0	999999000		Kerf width (without chipping) Min Z1	Kerf Check Data	RO	RW	RW
4636	KC2MIN_LIM	34	4	nm	0	0	999999000		Kerf width (without chipping) Min Z2	Kerf Check Data	RO	RW	RW
4637	KC_MIN_ERR	20	n	N/A	CALL	CALL	RETRY	"CALL" "PRECUT" "RETRY"	Error countermeasure (Kerf width (without chipping) Min)	Kerf Check Data	RO	RW	RW
4638	KC_MAXX_LIM	34	4	nm	0	0	999999000		Kerf width (include chipping) Z1	Kerf Check Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4639	KC2MAXX_LIM	34	4	nm	0	0	999999000		Kerf width (include chipping) Z2	Kerf Check Data	RO	RW	RW
4640	KC_MAXX_ERR	20	n	N/A	CALL	CALL	RETRY	"CALL" "PRECUT" "RETRY"	Error countermeasure (Kerf width (include chipping))	Kerf Check Data	RO	RW	RW
4641	KC_HAF_LIM	34	4	nm	0	0	999999000		Kerf width (center-chipping) Z1	Kerf Check Data	RO	RW	RW
4642	KC2HAF_LIM	34	4	nm	0	0	999999000		Kerf width (center-chipping) Z2	Kerf Check Data	RO	RW	RW
4643	KC_HAF_ERR	20	n	N/A	CALL	CALL	RETRY	"CALL" "PRECUT" "RETRY"	Error countermeasure (Kerf width (center-chipping))	Kerf Check Data	RO	RW	RW
4644	KC_CHIP_LIM	34	4	nm	0	0	999999000		Chipping size Z1	Kerf Check Data	RO	RW	RW
4645	KC2CHIP_LIM	34	4	nm	0	0	999999000		Chipping size Z2	Kerf Check Data	RO	RW	RW
4646	KC_CHIP_ERR	20	n	N/A	CALL	CALL	RETRY	"CALL" "PRECUT" "RETRY" "SETUP"	Error countermeasure (Chipping size)	Kerf Check Data	RO	RW	RW
4647	KC_AREA_LIM	34	4	Pixel	0	0	9999999		Chipping area Z1	Kerf Check Data	RO	RW	RW
4648	KC2AREA_LIM	34	4	Pixel	0	0	9999999		Chipping area Z2	Kerf Check Data	RO	RW	RW
4649	KC_AREA_ERR	20	n	N/A	CALL	CALL	RETRY	"CALL" "PRECUT" "RETRY" "SETUP"	Error countermeasure (Chipping area)	Kerf Check Data	RO	RW	RW
4650	KC_PER_Y	34	4	nm	0	0	999999000		Y permission	Kerf Check Data	RO	RW	RW
4651	KC_CUT_DEP	34	4	nm	0	0	10000000		Z2 cut depth	Kerf Check Data	RO	RW	RW
4652	KC_RETRY	34	4	times	0	0	99		Retry times	Kerf Check Data2	RO	RW	RW
4653	KC_BLOW_TIM	34	4	sec	0	0	99		Air blow timer	Kerf Check Data2	RO	RW	RW
4654	KC_FOCUS	20	n	N/A	NO	NO	YES		Auto focus	Kerf Check Data2	RO	RW	RW
4655	KC_A_LIGHT	20	n	N/A	NO	NO	YES		Auto light (retry)	Kerf Check Data2	RO	RW	RW
4656	KC_DIR_CH1	34	4	%	0	0	100		Kerfcheck Light level Dir	Kerf Check Data	RO	RW	RW
4657	KC_OBL_CH1	34	4	%	0	0	100		Kerfcheck Light level Obl	Kerf Check Data	RO	RW	RW
4658	KC_SPECIAL	20	n	N/A	NO	NO	YES		Special data	Kerf Check Data2	RO	RW	RW
4659	KC_BEVEL	20	n	N/A	*	*	Z1	"Z1" "Z2" "*)"	Bevel cut axis	Kerf Check Data2	RO	RW	RW
4660	KC_VE_WIDTH	34	4	nm	0	0	1000000		Bevel Cut Kerf width	Kerf Check Data2	RO	RW	RW
4661	KC_VE_ADJZ	34	4	nm	0	0	10000000		Bevel Cut Z-axis adjust	Kerf Check Data2	RO	RW	RW
4662	KC_VE_ADJW	34	4	nm	0	0	10000000		Bevel Cut Width adjust	Kerf Check Data2	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4663	KC_METHOD	20	n	N/A	TWICE	ONCE	TWICE		Z2 data Check method	Kerf Check Data	RO	RW	RW
4666	KC_CUT_SPDX	34	4	nm/sec	0	0	1000000000		Z2 data Feed speed	Kerf Check Data	RO	RW	RW
4667	KC_Z1_POSM	34	4	nm	0	-1000000	10000000		Focus point Z1	Kerf Check Data2	RO	RW	RW
4668	KC_Z2_POSM	34	4	nm	0	-1000000	10000000		Focus point Z2	Kerf Check Data2	RO	RW	RW
4675	FORM_SLICE	34	4	N/A	0	0	255		Shape recognition Slice level	Device Data	RO	RW	RW
4676	KC_SENSE[1]	34	4	N/A	0	0	3		Sensitivity Z2	Kerf Check Data2	RO	RW	RW
4680	KC_DIR_Z1[0]	34	4	%	0	0	100		Kerfcheck Light level (Dir) Z1 CH1	Kerf Check Data2	RO	RW	RW
4681	KC_DIR_Z1[1]	34	4	%	0	0	100		Kerfcheck Light level (Dir) Z1 CH2	Kerf Check Data2	RO	RW	RW
4682	KC_DIR_Z1[2]	34	4	%	0	0	100		Kerfcheck Light level (Dir) Z1 CH3	Kerf Check Data2	RO	RW	RW
4683	KC_DIR_Z1[3]	34	4	%	0	0	100		Kerfcheck Light level (Dir) Z1 CH4	Kerf Check Data2	RO	RW	RW
4690	KC_OBL_Z1[0]	34	4	%	0	0	100		Kerfcheck Light level (Obl) Z1 CH1	Kerf Check Data2	RO	RW	RW
4691	KC_OBL_Z1[1]	34	4	%	0	0	100		Kerfcheck Light level (Obl) Z1 CH2	Kerf Check Data2	RO	RW	RW
4692	KC_OBL_Z1[2]	34	4	%	0	0	100		Kerfcheck Light level (Obl) Z1 CH3	Kerf Check Data2	RO	RW	RW
4693	KC_OBL_Z1[3]	34	4	%	0	0	100		Kerfcheck Light level (Obl) Z1 CH4	Kerf Check Data2	RO	RW	RW
4700	KC_DIR_Z2[0]	34	4	%	0	0	100		Kerfcheck Light level (Dir) Z2 CH1	Kerf Check Data2	RO	RW	RW
4701	KC_DIR_Z2[1]	34	4	%	0	0	100		Kerfcheck Light level (Dir) Z2 CH2	Kerf Check Data2	RO	RW	RW
4702	KC_DIR_Z2[2]	34	4	%	0	0	100		Kerfcheck Light level (Dir) Z2 CH3	Kerf Check Data2	RO	RW	RW
4703	KC_DIR_Z2[3]	34	4	%	0	0	100		Kerfcheck Light level (Dir) Z2 CH4	Kerf Check Data2	RO	RW	RW
4710	KC_OBL_Z2[0]	34	4	%	0	0	100		Kerfcheck Light level (Obl) Z2 CH1	Kerf Check Data2	RO	RW	RW
4711	KC_OBL_Z2[1]	34	4	%	0	0	100		Kerfcheck Light level (Obl) Z2 CH2	Kerf Check Data2	RO	RW	RW
4712	KC_OBL_Z2[2]	34	4	%	0	0	100		Kerfcheck Light level (Obl) Z2 CH3	Kerf Check Data2	RO	RW	RW
4713	KC_OBL_Z2[3]	34	4	%	0	0	100		Kerfcheck Light level (Obl) Z2 CH4	Kerf Check Data2	RO	RW	RW
4720	IDX_X_MAC	34	4	nm	0	0	999999900		Index X Macro	Alignment Special Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4731	IDX_X_CH[1]	34	4	nm	0	0	999999900		Index X CH1	Alignment Special Data	RO	RW	RW
4732	IDX_X_CH[2]	34	4	nm	0	0	999999900		Index X CH2	Alignment Special Data	RO	RW	RW
4733	IDX_X_CH[3]	34	4	nm	0	0	999999900		Index X CH3	Alignment Special Data	RO	RW	RW
4734	IDX_X_CH[4]	34	4	nm	0	0	999999900		Index X CH4	Alignment Special Data	RO	RW	RW
4740	IDX_Y_MAC	34	4	nm	0	0	999999900		Index Y Macro	Alignment Special Data	RO	RW	RW
4751	IDX_Y_CH[1]	34	4	nm	0	0	999999900		Index Y CH1	Alignment Special Data	RO	RW	RW
4752	IDX_Y_CH[2]	34	4	nm	0	0	999999900		Index Y CH2	Alignment Special Data	RO	RW	RW
4753	IDX_Y_CH[3]	34	4	nm	0	0	999999900		Index Y CH3	Alignment Special Data	RO	RW	RW
4754	IDX_Y_CH[4]	34	4	nm	0	0	999999900		Index Y CH4	Alignment Special Data	RO	RW	RW
4760	SWING_MAC	34	4	nm	0	0	999999900		Theta adjust swing distance Macro	Alignment Special Data	RO	RW	RW
4771	SWING_CH[1]	34	4	nm	0	0	999999900		Theta adjust swing distance CH1	Alignment Special Data	RO	RW	RW
4772	SWING_CH[2]	34	4	nm	0	0	999999900		Theta adjust swing distance CH2	Alignment Special Data	RO	RW	RW
4773	SWING_CH[3]	34	4	nm	0	0	999999900		Theta adjust swing distance CH3	Alignment Special Data	RO	RW	RW
4774	SWING_CH[4]	34	4	nm	0	0	999999900		Theta adjust swing distance CH4	Alignment Special Data	RO	RW	RW
4780	TARGET_CH3	20	n	N/A	N/A	0	CH1	"CH1" "CH2" "※"	Target CH3	Alignment Special Data	RO	RW	RW
4781	TARGET_CH4	20	n	N/A	N/A	0	CH1	"CH1" "CH2" "※"	Target CH4	Alignment Special Data	RO	RW	RW
4782	SPIRAL_A_X	34	4	nm	0	0	999999900		Macro spiral size X	Alignment Special Data	RO	RW	RW
4783	SPIRAL_A_Y	34	4	nm	0	0	999999900		Macro spiral size Y	Alignment Special Data	RO	RW	RW
4784	KERF_C_ALI	20	n	N/A	NO	NO	T_ADJ	"NO" "Y_ADJ" "T_ADJ"	Kerf center alignment	Alignment Special Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4785	KERF_C_SIZE	34	4	nm	0	0	999999900		Kerf center alignment Recognition area Y(+/-)	Alignment Special Data	RO	RW	RW
4786	KERF_W_SIZE	34	4	nm	0	0	999999900		Kerf center alignment Recognition area window size	Alignment Special Data	RO	RW	RW
4787	KERF_C_DIR	34	4	%	0	0	100		Kerf center alignment Light level Dir	Alignment Special Data	RO	RW	RW
4788	KERF_C_OBL	34	4	%	0	0	100		Kerf center alignment Light level Obl	Alignment Special Data	RO	RW	RW
4789	FOCUS_K_WX	34	4	Pixel	0	0	512		Kerf center alignment Auto focus area X	Alignment Special Data	RO	RW	RW
4790	FOCUS_K_WY	34	4	Pixel	0	0	480		Kerf center alignment Auto focus area Y	Alignment Special Data	RO	RW	RW
4800	PC_TABLE[0]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 1	Process Control Table	RO	RW	RW
4801	PC_TABLE[1]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 2	Process Control Table	RO	RW	RW
4802	PC_TABLE[2]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 3	Process Control Table	RO	RW	RW
4803	PC_TABLE[3]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 4	Process Control Table	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4804	PC_TABLE[4]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 5	Process Control Table	RO	RW	RW
4805	PC_TABLE[5]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 6	Process Control Table	RO	RW	RW
4806	PC_TABLE[6]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 7	Process Control Table	RO	RW	RW
4807	PC_TABLE[7]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 8	Process Control Table	RO	RW	RW
4808	PC_TABLE[8]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 9	Process Control Table	RO	RW	RW
4809	PC_TABLE[9]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 10	Process Control Table	RO	RW	RW
4810	PC_TABLE[10]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 11	Process Control Table	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4811	PC_TABLE[11]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 12	Process Control Table	RO	RW	RW
4812	PC_TABLE[12]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 13	Process Control Table	RO	RW	RW
4813	PC_TABLE[13]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 14	Process Control Table	RO	RW	RW
4814	PC_TABLE[14]	20	n	N/A	N/A	ALI	CUT_CSP	"ALI" "ALI_FAST" "ALI_CSP" "ALIFRONT" "CUT" "CUT_CSP"	Process ID 15	Process Control Table	RO	RW	RW
4820	PC_PARA[0]	20	n	N/A	N/A	N/A	N/A		Parameter 1	Process Control Table	RO	RW	RW
4821	PC_PARA[1]	20	n	N/A	N/A	N/A	N/A		Parameter 2	Process Control Table	RO	RW	RW
4822	PC_PARA[2]	20	n	N/A	N/A	N/A	N/A		Parameter 3	Process Control Table	RO	RW	RW
4823	PC_PARA[3]	20	n	N/A	N/A	N/A	N/A		Parameter 4	Process Control Table	RO	RW	RW
4824	PC_PARA[4]	20	n	N/A	N/A	N/A	N/A		Parameter 5	Process Control Table	RO	RW	RW
4825	PC_PARA[5]	20	n	N/A	N/A	N/A	N/A		Parameter 6	Process Control Table	RO	RW	RW
4826	PC_PARA[6]	20	n	N/A	N/A	N/A	N/A		Parameter 7	Process Control Table	RO	RW	RW
4827	PC_PARA[7]	20	n	N/A	N/A	N/A	N/A		Parameter 8	Process Control Table	RO	RW	RW
4828	PC_PARA[8]	20	n	N/A	N/A	N/A	N/A		Parameter 9	Process Control Table	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4829	PC_PARA[9]	20	n	N/A	N/A	N/A	N/A		Parameter 10	Process Control Table	RO	RW	RW
4830	PC_PARA[10]	20	n	N/A	N/A	N/A	N/A		Parameter 11	Process Control Table	RO	RW	RW
4831	PC_PARA[11]	20	n	N/A	N/A	N/A	N/A		Parameter 12	Process Control Table	RO	RW	RW
4832	PC_PARA[12]	20	n	N/A	N/A	N/A	N/A		Parameter 13	Process Control Table	RO	RW	RW
4833	PC_PARA[13]	20	n	N/A	N/A	N/A	N/A		Parameter 14	Process Control Table	RO	RW	RW
4834	PC_PARA[14]	20	n	N/A	N/A	N/A	N/A		Parameter 15	Process Control Table	RO	RW	RW
4840	WASH_TIME	54	4	sec	0	0	999		Washing time	Cleaning Data	RO	RO	RO
4841	WASH_REV	54	4	/min	0	0	3000		Washing revolution	Cleaning Data	RO	RO	RO
4842	RINSE_TIME	54	4	sec	0	0	999		Rinsing time	Cleaning Data	RO	RO	RO
4843	RINSE_REV	54	4	/min	0	0	3000		Rinsing revolution	Cleaning Data	RO	RO	RO
4844	DRY_TIME	54	4	sec	0	0	999		Drying time	Cleaning Data	RO	RO	RO
4845	DRY_REV	54	4	/min	0	0	3000		Drying revolution	Cleaning Data	RO	RO	RO
4846	TWASH_TIME	54	4	sec	0	0	999		Table washing time	Cleaning Data	RO	RO	RO
4847	TWASH_REV	54	4	/min	0	0	3000		Table washing revolution	Cleaning Data	RO	RO	RO
4848	TDRY_TIME	54	4	sec	0	0	999		Table drying time	Cleaning Data	RO	RO	RO
4849	TDRY_REV	54	4	/min	0	0	3000		Table drying revolution	Cleaning Data	RO	RO	RO
4850	TWASH_NO	54	4	pcs	0	0	999		Table drying frequency	Cleaning Data	RO	RO	RO
4851	TABLE_DEG	54	4	10^-3deg	0	0	360000		Table positioning angle	Cleaning Data	RO	RO	RO
4852	WASH_SIZE	54	4	N/A	0	0	1000000000		Washing stroke	Cleaning Data	RO	RO	RO
4853	W_USERPRG	20	n	N/A	N/A	NO	YES		Custom cleaning program	Cleaning Data	RO	RO	RO
4854	UV_TIME	54	4	sec	0	0	9999		UV lighting time	Cleaning Data	RO	RW	RW
4855	UV_BLOW	20	n	N/A	N/A	ON	OFF		UV N2 blow	Cleaning Data	RO	RW	RW
4860	ITEM[0]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "*****"	Custom Cleaning Program Seq.1 Item	Custom Cleaning Program	RO	RO	RO
4861	ITEM[1]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "*****"	Custom Cleaning Program Seq.2 Item	Custom Cleaning Program	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4862	ITEM[2]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.3 Item	Custom Cleaning Program	RO	RO	RO
4863	ITEM[3]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.4 Item	Custom Cleaning Program	RO	RO	RO
4864	ITEM[4]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.5 Item	Custom Cleaning Program	RO	RO	RO
4865	ITEM[5]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.6 Item	Custom Cleaning Program	RO	RO	RO
4866	ITEM[6]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.7 Item	Custom Cleaning Program	RO	RO	RO
4867	ITEM[7]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.8 Item	Custom Cleaning Program	RO	RO	RO
4868	ITEM[8]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.9 Item	Custom Cleaning Program	RO	RO	RO
4869	ITEM[9]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.10 Item	Custom Cleaning Program	RO	RO	RO
4870	ITEM[10]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.11 Item	Custom Cleaning Program	RO	RO	RO
4871	ITEM[11]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.12 Item	Custom Cleaning Program	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4872	ITEM[12]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "*****"	Custom Cleaning Program Seq.13 Item	Custom Cleaning Program	RO	RO	RO
4873	ITEM[13]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "*****"	Custom Cleaning Program Seq.14 Item	Custom Cleaning Program	RO	RO	RO
4874	ITEM[14]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "*****"	Custom Cleaning Program Seq.15 Item	Custom Cleaning Program	RO	RO	RO
4880	W_TIME[0]	54	4	sec	0	0	999		Custom Cleaning Program Seq.1 Time	Custom Cleaning Program	RO	RO	RO
4881	W_TIME[1]	54	4	sec	0	0	999		Custom Cleaning Program Seq.2 Time	Custom Cleaning Program	RO	RO	RO
4882	W_TIME[2]	54	4	sec	0	0	999		Custom Cleaning Program Seq.3 Time	Custom Cleaning Program	RO	RO	RO
4883	W_TIME[3]	54	4	sec	0	0	999		Custom Cleaning Program Seq.4 Time	Custom Cleaning Program	RO	RO	RO
4884	W_TIME[4]	54	4	sec	0	0	999		Custom Cleaning Program Seq.5 Time	Custom Cleaning Program	RO	RO	RO
4885	W_TIME[5]	54	4	sec	0	0	999		Custom Cleaning Program Seq.6 Time	Custom Cleaning Program	RO	RO	RO
4886	W_TIME[6]	54	4	sec	0	0	999		Custom Cleaning Program Seq.7 Time	Custom Cleaning Program	RO	RO	RO
4887	W_TIME[7]	54	4	sec	0	0	999		Custom Cleaning Program Seq.8 Time	Custom Cleaning Program	RO	RO	RO
4888	W_TIME[8]	54	4	sec	0	0	999		Custom Cleaning Program Seq.9 Time	Custom Cleaning Program	RO	RO	RO
4889	W_TIME[9]	54	4	sec	0	0	999		Custom Cleaning Program Seq.10 Time	Custom Cleaning Program	RO	RO	RO
4890	W_TIME[10]	54	4	sec	0	0	999		Custom Cleaning Program Seq.11 Time	Custom Cleaning Program	RO	RO	RO
4891	W_TIME[11]	54	4	sec	0	0	999		Custom Cleaning Program Seq.12 Time	Custom Cleaning Program	RO	RO	RO
4892	W_TIME[12]	54	4	sec	0	0	999		Custom Cleaning Program Seq.13 Time	Custom Cleaning Program	RO	RO	RO
4893	W_TIME[13]	54	4	sec	0	0	999		Custom Cleaning Program Seq.14 Time	Custom Cleaning Program	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4894	W_TIME[14]	54	4	sec	0	0	999		Custom Cleaning Program Seq.15 Time	Custom Cleaning Program	RO	RO	RO
4900	W_REV[0]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.1 Revolution	Custom Cleaning Program	RO	RO	RO
4901	W_REV[1]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.2 Revolution	Custom Cleaning Program	RO	RO	RO
4902	W_REV[2]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.3 Revolution	Custom Cleaning Program	RO	RO	RO
4903	W_REV[3]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.4 Revolution	Custom Cleaning Program	RO	RO	RO
4904	W_REV[4]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.5 Revolution	Custom Cleaning Program	RO	RO	RO
4905	W_REV[5]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.6 Revolution	Custom Cleaning Program	RO	RO	RO
4906	W_REV[6]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.7 Revolution	Custom Cleaning Program	RO	RO	RO
4907	W_REV[7]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.8 Revolution	Custom Cleaning Program	RO	RO	RO
4908	W_REV[8]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.9 Revolution	Custom Cleaning Program	RO	RO	RO
4909	W_REV[9]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.10 Revolution	Custom Cleaning Program	RO	RO	RO
4910	W_REV[10]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.11 Revolution	Custom Cleaning Program	RO	RO	RO
4911	W_REV[11]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.12 Revolution	Custom Cleaning Program	RO	RO	RO
4912	W_REV[12]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.13 Revolution	Custom Cleaning Program	RO	RO	RO
4913	W_REV[13]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.14 Revolution	Custom Cleaning Program	RO	RO	RO
4914	W_REV[14]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.15 Revolution	Custom Cleaning Program	RO	RO	RO
4920	UNIT_BLD	20	n	N/A	N/A	MM	INCH		Unit	Blade Replacement	RO	RW	RW
4921	CHG_BLADE	20	n	N/A	N/A	Z1	Z1Z2	"Z1" "Z2" "Z1Z2"	Axis to blade replacement	Blade Replacement	RO	RW	RW
4922	BLADE_LOT	20	n	N/A	N/A	N/A	N/A		Blade Lot ID Z1	Blade Replacement	RO	RW	RW
4923	BLADE_LOT2	20	n	N/A	N/A	N/A	N/A		Blade Lot ID Z2	Blade Replacement	RO	RW	RW
4924	BLADE_ID	20	n	N/A	N/A	N/A	N/A		Blade Spec Z1	Blade Replacement	RO	RW	RW
4925	BLADE_ID2	20	n	N/A	N/A	N/A	N/A		Blade Spec Z2	Blade Replacement	RO	RW	RW
4926	XCHG_REASON	10	1	N/A	0	0	9		Replacement reason Z1	Blade Replacement	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4927	XCHG_REASO2	10	1	N/A	0	0	9		Replacement reason Z2	Blade Replacement	RO	RW	RW
4928	BL_OLD_NEW	20	n	N/A	N/A	OLD	NEW	"OLD" "NEW"	Blade New/Old Z1	Blade Replacement	RO	RW	RW
4929	BL_OLD_NEW2	20	n	N/A	N/A	OLD	NEW	"OLD" "NEW"	Blade New/Old Z2	Blade Replacement	RO	RW	RW
4930	BLADE_DIA	54	4	nm	47000000	150000000	762000000		Blade O.D. Z1	Blade Replacement	RO	RW	RW
4931	BLADE_DIA2	54	4	nm	47000000	150000000	762000000		Blade O.D. Z2	Blade Replacement	RO	RW	RW
4932	BLADE_THICK	54	4	nm	55000	0	1020000		Blade thickness Z1	Blade Replacement	RO	RW	RW
4933	BLADE_THIC2	54	4	nm	55000	0	1020000		Blade thickness Z2	Blade Replacement	RO	RW	RW
4934	BLADE_COU	54	4	lines	0	0	99999999		Blade life (line) Z1	Blade Replacement	RO	RW	RW
4935	BLADE_COU2	54	4	lines	0	0	99999999		Blade life (line) Z2	Blade Replacement	RO	RW	RW
4936	BLADE_LEN	54	4	mm	0	0	99999999		Blade life (distance) Z1	Blade Replacement	RO	RW	RW
4937	BLADE_LEN2	54	4	mm	0	0	99999999		Blade life (distance) Z2	Blade Replacement	RO	RW	RW
4938	BLADE_TYPE	10	1	N/A	0	0	1	1=HUB 0=HUBLESS	Blade type Z1	Blade Replacement	RO	RW	RW
4939	BLADE_TYPE2	10	1	N/A	0	0	1	1=HUB 0=HUBLESS	Blade type Z2	Blade Replacement	RO	RW	RW
4940	HAB_TIP	54	4	nm	800000	0	999999000		Hub exposure Z1	Blade Replacement	RO	RW	RW
4941	HAB_TIP2	54	4	nm	800000	0	999999000		Hub exposure Z2	Blade Replacement	RO	RW	RW
4942	FLANGE_DIA	54	4	nm	0	0	5080000		Flange O.D. Z1	Blade Replacement	RO	RW	RW
4943	FLANGE_DIA2	54	4	nm	0	0	5080000		Flange O.D. Z2	Blade Replacement	RO	RW	RW
4950	UNIT_SET	20	n	N/A	MM	MM	INCH	"MM" "INCH"	Unit	Setup Data1	RO	RW	RW
4951	CT_SIZE	54	4	Inch	8	8	23	6-12=CT size 18-=SQUARE1-	Chuck table size	Setup Data1	RO	RW	RW
4952	SETUP_LIM_L	54	4	nm	100000	0	999999		Excessive wear limit Z1	Setup Data1	RO	RW	RW
4953	SETUP_LI2_L	54	4	nm	100000	0	999999		Excessive wear limit Z2	Setup Data1	RO	RW	RW
4954	SETUP_LIM_G	54	4	nm	10000	0	999999		Insufficient wear limit Z1	Setup Data1	RO	RW	RW
4955	SETUP_LI2_G	54	4	nm	10000	0	999999		Insufficient wear limit Z2	Setup Data1	RO	RW	RW
4956	SETUP_RETRY	54	4	N/A	0	0	999		Retry (for auto setup)	Setup Data1	RO	RW	RW
4957	SETUP_RTY2	54	4	N/A	0	0	999		C/T setup check	Setup Data1	RO	RW	RW
4958	SETUP_MODE	20	n	N/A	AUTO	NO	AUTO	"AUTO" "CALL" "NO"	Call operator When auto setup	Setup Data1	RO	RW	RW
4959	PRE_CUT_UN	20	n	N/A	NO	NO	YES		Precut after Non Contact setup	Setup Data1	RO	RW	RW
4960	UNTOUCH_ADJ	34	4	nm	0	-20000	20000		Non contact setup correction value Z1	Maker Data1	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
4961	UNTOUCH_AD2	34	4	nm	0	-20000	20000		Non contact setup correction value Z2	Maker Data1	RO	RO	RO
4962	SETUPT_U	20	n	N/A	NONCONTACT	CONTACT	NONCONTACT		Setup default	Setup Data1	RO	RW	RW
4963	UNSET_LIM	54	4	nm	5000	0	999999000		Non Contact Reappearance amount	Setup Data1	RO	RW	RW
4964	CT_LIM	54	4	nm	0	0	999999000		C/T Reappearance amount	Setup Data1	RO	RW	RW
4965	BLADE_SAFE	54	4	nm	50000	0	999999000		Clearance between Flange and work surface	Setup Data1	RO	RW	RW
4966	BLADE_BLOW	54	4	sec	10	0	999		C/T Blade blow time	Setup Data1	RO	RW	RW
4967	BLADE_BLOWN	54	4	sec	0	0	999		Non Contact Blade blow time	Setup Data1	RO	RW	RW
4968	UNSET_BWAIT	54	4	sec	2	1	999		Waiting time to blow air after Non Contact setup	Setup Data1	RO	RW	RW
4969	NCS_BLOW	54	4	sec	2	1	999		Blow time at NCS block	Setup Data1	RO	RW	RW
4970	DOWN_SPDZ	54	4	nm/sec	10000000	100000	1000000000		Non Contact Setup high speed	Setup Data2	RO	RW	RW
4971	DOWN_SPDZ2	54	4	nm/sec	10000000	100000	1000000000		C/T Setup high speed	Setup Data2	RO	RW	RW
4972	SETUP_SPDZ	54	4	nm/sec	10000000	100000	1000000000		Non Contact Setup low speed	Setup Data2	RO	RW	RW
4973	SETUP_SPDZ2	54	4	nm/sec	10000000	100000	1000000000		C/T Setup low speed	Setup Data2	RO	RW	RW
4974	SETUP_SAFE	54	4	nm	3000000	1000000	60000000		Non Contact Setup low speed stroke	Setup Data2	RO	RW	RW
4975	SETUP_SAFE2	54	4	nm	3000000	1000000	60000000		C/T Setup low speed stroke	Setup Data2	RO	RW	RW
4976	SETUP_IDXT	54	4	10^-6deg	1000000	0	190000000		Theta-Rotation for contact setup	Setup Data2	RO	RW	RW
4977	SETUP_POSTS	54	4	10^-6deg	10000000	5000000	290000000		Theta-Rotation for start position	Setup Data2	RO	RW	RW
4978	SETUP_POSTE	54	4	10^-6deg	250000000	5000000	290000000		Theta-Rotation for end position	Setup Data2	RO	RW	RW
4979	SETUP_CNT	54	4	N/A	0	0	9999		Chuck table rotation completed	Setup Data2	RO	RW	RW
5000	KERFC_NEXT	20	n	N/A	NO	NO	YES		Kerf check retry after hair line adjustment	Function Data Maintenance	RO	RW	RW
5001	OIL_PASS	20	n	N/A	NO	NO	YES		Greasing for axis maintenance	Function Data Maintenance	RO	RW	RW
5002	KC_ERR_PASS	20	n	N/A	NO	NO	YES		Keep work wet	Function Data Maintenance	RO	RW	RW
5003	SPNDL_IDLE	54	4	min	0	0	99		Spindle idling time	Function Data Maintenance	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5030	WATER_IDLE[0]	20	n	N/A	N/A	ON	OFF		Idling Cut water	Water Program Data Maintenance	RO	RW	RW
5031	WATER_IDLE[1]	20	n	N/A	N/A	ON	OFF		Idling Air curtain	Water Program Data Maintenance	RO	RW	RW
5032	WATER_IDLE[2]	20	n	N/A	N/A	ON	OFF		Idling Water curtain	Water Program Data Maintenance	RO	RW	RW
5040	WATER_AUTO[0]	20	n	N/A	N/A	ON	OFF		Auto_start Cut water	Water Program Data Maintenance	RO	RW	RW
5041	WATER_AUTO[1]	20	n	N/A	N/A	ON	OFF		Auto_start Air curtain	Water Program Data Maintenance	RO	RW	RW
5042	WATER_AUTO[2]	20	n	N/A	N/A	ON	OFF		Auto_start Water curtain	Water Program Data Maintenance	RO	RW	RW
5050	WATER_ALI[0]	20	n	N/A	N/A	ON	OFF		Align Cut water	Water Program Data Maintenance	RO	RW	RW
5051	WATER_ALI[1]	20	n	N/A	N/A	ON	OFF		Align Air curtain	Water Program Data Maintenance	RO	RW	RW
5052	WATER_ALI[2]	20	n	N/A	N/A	ON	OFF		Align Water curtain	Water Program Data Maintenance	RO	RW	RW
5061	WATER_CUT[1]	20	n	N/A	N/A	ON	OFF		Cut Air curtain	Water Program Data Maintenance	RO	RW	RW
5062	WATER_CUT[2]	20	n	N/A	N/A	ON	OFF		Cut Water curtain	Water Program Data Maintenance	RO	RW	RW
5070	WATER_PAUSE[0]	20	n	N/A	N/A	ON	OFF		Cut_pause Cut water	Water Program Data Maintenance	RO	RW	RW
5071	WATER_PAUSE[1]	20	n	N/A	N/A	ON	OFF		Cut_pause Air curtain	Water Program Data Maintenance	RO	RW	RW
5072	WATER_PAUSE[2]	20	n	N/A	N/A	ON	OFF		Cut_pause Water curtain	Water Program Data Maintenance	RO	RW	RW
5080	WATER_KERFC[0]	20	n	N/A	N/A	ON	OFF		Kerf_check Cut water	Water Program Data Maintenance	RO	RW	RW
5081	WATER_KERFC[1]	20	n	N/A	N/A	ON	OFF		Kerf_check Air curtain	Water Program Data Maintenance	RO	RW	RW
5082	WATER_KERFC[2]	20	n	N/A	N/A	ON	OFF		Kerf_check Water curtain	Water Program Data Maintenance	RO	RW	RW
5090	WATER_TOCLN[0]	20	n	N/A	N/A	ON	OFF		To_clean Cut water	Water Program Data Maintenance	RO	RW	RW
5091	WATER_TOCLN[1]	20	n	N/A	N/A	ON	OFF		To_clean Air curtain	Water Program Data Maintenance	RO	RW	RW
5092	WATER_TOCLN[2]	20	n	N/A	N/A	ON	OFF		To_clean Water curtain	Water Program Data Maintenance	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5100	IDLE[0]	54	4	N/A	0	0	6	0=OFF 1=ON 2=200 ms Flashing 3=500 ms Flashing 4=1 sec Flashing 5=2 sec Flashing 6=periodic flashing	Idle Buzzer1	Status indicator Data Maintenance	RO	RW	RW
5101	IDLE[1]	54	4	N/A	0	0	6		Idle Red	Status indicator Data Maintenance	RO	RW	RW
5102	IDLE[2]	54	4	N/A	0	0	6		Idle Yellow	Status indicator Data Maintenance	RO	RW	RW
5103	IDLE[3]	54	4	N/A	0	0	6		Idle Green	Status indicator Data Maintenance	RO	RW	RW
5104	IDLE[4]	54	4	N/A	0	0	6		Idle Op1	Status indicator Data Maintenance	RO	RW	RW
5105	IDLE[5]	54	4	N/A	0	0	6		Idle Op2	Status indicator Data Maintenance	RO	RW	RW
5106	IDLE[6]	54	4	N/A	0	0	6		Idle Buzzer2	Status indicator Data Maintenance	RO	RW	RW
5110	ALARM[0]	54	4	N/A	0	0	6		Alarm Buzzer1	Maker Data1	RO	RO	RO
5111	ALARM[1]	54	4	N/A	0	0	6		Alarm Red	Maker Data1	RO	RO	RO
5112	ALARM[2]	54	4	N/A	0	0	6		Alarm Yellow	Maker Data1	RO	RO	RO
5113	ALARM[3]	54	4	N/A	0	0	6		Alarm Green	Maker Data1	RO	RO	RO
5114	ALARM[4]	54	4	N/A	0	0	6		Alarm Op1	Maker Data1	RO	RO	RO
5115	ALARM[5]	54	4	N/A	0	0	6		Alarm Op2	Maker Data1	RO	RO	RO
5116	ALARM[6]	54	4	N/A	0	0	6		Alarm Buzzer2	Maker Data1	RO	RO	RO
5120	AUTO[0]	54	4	N/A	0	0	6		Manual cut Buzzer1	Status indicator Data Maintenance	RO	RW	RW
5121	AUTO[1]	54	4	N/A	0	0	6		Manual cut Red	Status indicator Data Maintenance	RO	RW	RW
5122	AUTO[2]	54	4	N/A	0	0	6		Manual cut Yellow	Status indicator Data Maintenance	RO	RW	RW
5123	AUTO[3]	54	4	N/A	0	0	6		Manual cut Green	Status indicator Data Maintenance	RO	RW	RW
5124	AUTO[4]	54	4	N/A	0	0	6		Manual cut Op1	Status indicator Data Maintenance	RO	RW	RW
5125	AUTO[5]	54	4	N/A	0	0	6		Manual cut Op2	Status indicator Data Maintenance	RO	RW	RW
5126	AUTO[6]	54	4	N/A	0	0	6		Manual cut Buzzer2	Status indicator Data Maintenance	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5130	AUTO1[0]	54	4	N/A	0	0	6		Manual alignment Buzzer1	Status indicator Data Maintenance	RO	RW	RW
5131	AUTO1[1]	54	4	N/A	0	0	6		Manual alignment Red	Status indicator Data Maintenance	RO	RW	RW
5132	AUTO1[2]	54	4	N/A	0	0	6		Manual alignment Yellow	Status indicator Data Maintenance	RO	RW	RW
5133	AUTO1[3]	54	4	N/A	0	0	6		Manual alignment Green	Status indicator Data Maintenance	RO	RW	RW
5134	AUTO1[4]	54	4	N/A	0	0	6		Manual alignment Op1	Status indicator Data Maintenance	RO	RW	RW
5135	AUTO1[5]	54	4	N/A	0	0	6		Manual alignment Op2	Status indicator Data Maintenance	RO	RW	RW
5136	AUTO1[6]	54	4	N/A	0	0	6		Manual alignment Buzzer2	Status indicator Data Maintenance	RO	RW	RW
5140	FULLAUTO[0]	54	4	N/A	0	0	6		Full auto Buzzer1	Status indicator Data Maintenance	RO	RW	RW
5141	FULLAUTO[1]	54	4	N/A	0	0	6		Full auto Red	Status indicator Data Maintenance	RO	RW	RW
5142	FULLAUTO[2]	54	4	N/A	0	0	6		Full auto Yellow	Status indicator Data Maintenance	RO	RW	RW
5143	FULLAUTO[3]	54	4	N/A	0	0	6		Full auto Green	Status indicator Data Maintenance	RO	RW	RW
5144	FULLAUTO[4]	54	4	N/A	0	0	6		Full auto Op1	Status indicator Data Maintenance	RO	RW	RW
5145	FULLAUTO[5]	54	4	N/A	0	0	6		Full auto Op2	Status indicator Data Maintenance	RO	RW	RW
5146	FULLAUTO[6]	54	4	N/A	0	0	6		Full auto Buzzer2	Status indicator Data Maintenance	RO	RW	RW
5150	WAIT[0]	54	4	N/A	0	0	6		Cutting pause Buzzer1	Status indicator Data Maintenance	RO	RW	RW
5151	WAIT[1]	54	4	N/A	0	0	6		Cutting pause Red	Status indicator Data Maintenance	RO	RW	RW
5152	WAIT[2]	54	4	N/A	0	0	6		Cutting pause Yellow	Status indicator Data Maintenance	RO	RW	RW
5153	WAIT[3]	54	4	N/A	0	0	6		Cutting pause Green	Status indicator Data Maintenance	RO	RW	RW
5154	WAIT[4]	54	4	N/A	0	0	6		Cutting pause Op1	Status indicator Data Maintenance	RO	RW	RW
5155	WAIT[5]	54	4	N/A	0	0	6		Cutting pause Op2	Status indicator Data Maintenance	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5156	WAIT[6]	54	4	N/A	0	0	6		Cutting pause Buzzer2	Status indicator Data Maintenance	RO	RW	RW
5160	MANUAL[0]	54	4	N/A	0	0	6		Other operations Buzzer1	Status indicator Data Maintenance	RO	RW	RW
5161	MANUAL[1]	54	4	N/A	0	0	6		Other operations Red	Status indicator Data Maintenance	RO	RW	RW
5162	MANUAL[2]	54	4	N/A	0	0	6		Other operations Yellow	Status indicator Data Maintenance	RO	RW	RW
5163	MANUAL[3]	54	4	N/A	0	0	6		Other operations Green	Status indicator Data Maintenance	RO	RW	RW
5164	MANUAL[4]	54	4	N/A	0	0	6		Other operations Op1	Status indicator Data Maintenance	RO	RW	RW
5165	MANUAL[5]	54	4	N/A	0	0	6		Other operations Op2	Status indicator Data Maintenance	RO	RW	RW
5166	MANUAL[6]	54	4	N/A	0	0	6		Other operations Buzzer2	Status indicator Data Maintenance	RO	RW	RW
5170	CALL0[0]	54	4	N/A	0	0	6		Operator call Buzzer1	Status indicator Data Maintenance	RO	RW	RW
5171	CALL0[1]	54	4	N/A	0	0	6		Operator call Red	Status indicator Data Maintenance	RO	RW	RW
5172	CALL0[2]	54	4	N/A	0	0	6		Operator call Yellow	Status indicator Data Maintenance	RO	RW	RW
5173	CALL0[3]	54	4	N/A	0	0	6		Operator call Green	Status indicator Data Maintenance	RO	RW	RW
5174	CALL0[4]	54	4	N/A	0	0	6		Operator call Op1	Status indicator Data Maintenance	RO	RW	RW
5175	CALL0[5]	54	4	N/A	0	0	6		Operator call Op2	Status indicator Data Maintenance	RO	RW	RW
5176	CALL0[6]	54	4	N/A	0	0	6		Operator call Buzzer2	Status indicator Data Maintenance	RO	RW	RW
5180	CALL1[0]	54	4	N/A	0	0	6		Complete at loader stop Buzzer1	Status indicator Data Maintenance	RO	RW	RW
5181	CALL1[1]	54	4	N/A	0	0	6		Complete at loader stop Red	Status indicator Data Maintenance	RO	RW	RW
5182	CALL1[2]	54	4	N/A	0	0	6		Complete at loader stop Yellow	Status indicator Data Maintenance	RO	RW	RW
5183	CALL1[3]	54	4	N/A	0	0	6		Complete at loader stop Green	Status indicator Data Maintenance	RO	RW	RW
5184	CALL1[4]	54	4	N/A	0	0	6		Complete at loader stop Op1	Status indicator Data Maintenance	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5185	CALL1[5]	54	4	N/A	0	0	6		Complete at loader stop Op2	Status indicator Data Maintenance	RO	RW	RW
5186	CALL1[6]	54	4	N/A	0	0	6		Complete at loader stop Buzzer2	Status indicator Data Maintenance	RO	RW	RW
5190	CALL2[0]	54	4	N/A	0	0	6		Complete of process Buzzer1	Status indicator Data Maintenance	RO	RW	RW
5191	CALL2[1]	54	4	N/A	0	0	6		Complete of process Red	Status indicator Data Maintenance	RO	RW	RW
5192	CALL2[2]	54	4	N/A	0	0	6		Complete of process Yellow	Status indicator Data Maintenance	RO	RW	RW
5193	CALL2[3]	54	4	N/A	0	0	6		Complete of process Green	Status indicator Data Maintenance	RO	RW	RW
5194	CALL2[4]	54	4	N/A	0	0	6		Complete of process Op1	Status indicator Data Maintenance	RO	RW	RW
5195	CALL2[5]	54	4	N/A	0	0	6		Complete of process Op2	Status indicator Data Maintenance	RO	RW	RW
5196	CALL2[6]	54	4	N/A	0	0	6		Complete of process Buzzer2	Status indicator Data Maintenance	RO	RW	RW
5200	CALL3[0]	54	4	N/A	0	0	6		Dispose of last work Buzzer1	Status indicator Data Maintenance	RO	RW	RW
5201	CALL3[1]	54	4	N/A	0	0	6		Dispose of last work Red	Status indicator Data Maintenance	RO	RW	RW
5202	CALL3[2]	54	4	N/A	0	0	6		Dispose of last work Yellow	Status indicator Data Maintenance	RO	RW	RW
5203	CALL3[3]	54	4	N/A	0	0	6		Dispose of last work Green	Status indicator Data Maintenance	RO	RW	RW
5204	CALL3[4]	54	4	N/A	0	0	6		Dispose of last work Op1	Status indicator Data Maintenance	RO	RW	RW
5205	CALL3[5]	54	4	N/A	0	0	6		Dispose of last work Op2	Status indicator Data Maintenance	RO	RW	RW
5206	CALL3[6]	54	4	N/A	0	0	6		Dispose of last work Buzzer2	Status indicator Data Maintenance	RO	RW	RW
5210	USER[0]	54	4	N/A	0	0	6		User defined Buzzer1	Status indicator Data Maintenance	RO	RW	RW
5211	USER[1]	54	4	N/A	0	0	6		User defined Red	Status indicator Data Maintenance	RO	RW	RW
5212	USER[2]	54	4	N/A	0	0	6		User defined Yellow	Status indicator Data Maintenance	RO	RW	RW
5213	USER[3]	54	4	N/A	0	0	6		User defined Green	Status indicator Data Maintenance	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5214	USER[4]	54	4	N/A	0	0	6		User defined Op1	Status indicator Data Maintenance	RO	RW	RW
5215	USER[5]	54	4	N/A	0	0	6		User defined Op2	Status indicator Data Maintenance	RO	RW	RW
5216	USER[6]	54	4	N/A	0	0	6		User defined Buzzer2	Status indicator Data Maintenance	RO	RW	RW
5220	PAT_SPEED	54	4	ms	1000	0	9999		periodic flashing	Status indicator Data Maintenance	RO	RW	RW
5231	FRAME_NO[1]	54	4	N/A	N/A	N/A	N/A		Frame No.1 Slot	Frame Size Register	RO	RW	RW
5232	FRAME_NO[2]	54	4	N/A	N/A	N/A	N/A		Frame No.2 Slot	Frame Size Register	RO	RW	RW
5233	FRAME_NO[3]	54	4	N/A	N/A	N/A	N/A		Frame No.3 Slot	Frame Size Register	RO	RW	RW
5234	FRAME_NO[4]	54	4	N/A	N/A	N/A	N/A		Frame No.4 Slot	Frame Size Register	RO	RW	RW
5235	FRAME_NO[5]	54	4	N/A	N/A	N/A	N/A		Frame No.5 Slot	Frame Size Register	RO	RW	RW
5236	FRAME_NO[6]	54	4	N/A	N/A	N/A	N/A		Frame No.6 Slot	Frame Size Register	RO	RW	RW
5241	FRAME_STEP[1]	54	4	nm	10000000	N/A	N/A		Frame No.1 Frame pitch	Frame Size Register	RO	RW	RW
5242	FRAME_STEP[2]	54	4	nm	10000000	N/A	N/A		Frame No.2 Frame pitch	Frame Size Register	RO	RW	RW
5243	FRAME_STEP[3]	54	4	nm	10000000	N/A	N/A		Frame No.3 Frame pitch	Frame Size Register	RO	RW	RW
5244	FRAME_STEP[4]	54	4	nm	10000000	N/A	N/A		Frame No.4 Frame pitch	Frame Size Register	RO	RW	RW
5245	FRAME_STEP[5]	54	4	nm	10000000	N/A	N/A		Frame No.5 Frame pitch	Frame Size Register	RO	RW	RW
5246	FRAME_STEP[6]	54	4	nm	10000000	N/A	N/A		Frame No.6 Frame pitch	Frame Size Register	RO	RW	RW
5251	CASSET_STEP[1]	54	4	nm	50000000	N/A	N/A		Frame No.1 Cassette height	Frame Size Register	RO	RW	RW
5252	CASSET_STEP[2]	54	4	nm	50000000	N/A	N/A		Frame No.2 Cassette height	Frame Size Register	RO	RW	RW
5253	CASSET_STEP[3]	54	4	nm	50000000	N/A	N/A		Frame No.3 Cassette height	Frame Size Register	RO	RW	RW
5254	CASSET_STEP[4]	54	4	nm	50000000	N/A	N/A		Frame No.4 Cassette height	Frame Size Register	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5255	CASSET_STEP[5]	54	4	nm	50000000	N/A	N/A		Frame No.5 Cassette height	Frame Size Register	RO	RW	RW
5256	CASSET_STEP[6]	54	4	nm	50000000	N/A	N/A		Frame No.6 Cassette height	Frame Size Register	RO	RW	RW
5261	LOAD_POSE[1]	54	4	nm	60000000	N/A	N/A		Frame No.1 E/S-0 point	Frame Size Register	RO	RW	RW
5262	LOAD_POSE[2]	54	4	nm	60000000	N/A	N/A		Frame No.2 E/S-0 point	Frame Size Register	RO	RW	RW
5263	LOAD_POSE[3]	54	4	nm	60000000	N/A	N/A		Frame No.3 E/S-0 point	Frame Size Register	RO	RW	RW
5264	LOAD_POSE[4]	54	4	nm	60000000	N/A	N/A		Frame No.4 E/S-0 point	Frame Size Register	RO	RW	RW
5265	LOAD_POSE[5]	54	4	nm	60000000	N/A	N/A		Frame No.5 E/S-0 point	Frame Size Register	RO	RW	RW
5266	LOAD_POSE[6]	54	4	nm	60000000	N/A	N/A		Frame No.6 E/S-0 point	Frame Size Register	RO	RW	RW
5281	STOP_POST[1]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.1 C/T-0 point	Frame Size Register	RO	RW	RW
5282	STOP_POST[2]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.2 C/T-0 point	Frame Size Register	RO	RW	RW
5283	STOP_POST[3]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.3 C/T-0 point	Frame Size Register	RO	RW	RW
5284	STOP_POST[4]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.4 C/T-0 point	Frame Size Register	RO	RW	RW
5285	STOP_POST[5]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.5 C/T-0 point	Frame Size Register	RO	RW	RW
5286	STOP_POST[6]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.6 C/T-0 point	Frame Size Register	RO	RW	RW
5291	STOP_POSS[1]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.1 S/T-0 point	Frame Size Register	RO	RW	RW
5292	STOP_POSS[2]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.2 S/T-0 point	Frame Size Register	RO	RW	RW
5293	STOP_POSS[3]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.3 S/T-0 point	Frame Size Register	RO	RW	RW
5294	STOP_POSS[4]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.4 S/T-0 point	Frame Size Register	RO	RW	RW
5295	STOP_POSS[5]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.5 S/T-0 point	Frame Size Register	RO	RW	RW
5296	STOP_POSS[6]	54	4	10^-6deg	190000000	N/A	N/A		Frame No.6 S/T-0 point	Frame Size Register	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5301	CASSET_FNO[1]	54	4	N/A	N/A	N/A	N/A		Frame No.1 No. of cassette set	Frame Size Register	RO	RW	RW
5302	CASSET_FNO[2]	54	4	N/A	N/A	N/A	N/A		Frame No.2 No. of cassette set	Frame Size Register	RO	RW	RW
5303	CASSET_FNO[3]	54	4	N/A	N/A	N/A	N/A		Frame No.3 No. of cassette set	Frame Size Register	RO	RW	RW
5304	CASSET_FNO[4]	54	4	N/A	N/A	N/A	N/A		Frame No.4 No. of cassette set	Frame Size Register	RO	RW	RW
5305	CASSET_FNO[5]	54	4	N/A	N/A	N/A	N/A		Frame No.5 No. of cassette set	Frame Size Register	RO	RW	RW
5306	CASSET_FNO[6]	54	4	N/A	N/A	N/A	N/A		Frame No.6 No. of cassette set	Frame Size Register	RO	RW	RW
5311	LOAD_POSC[1]	54	4	nm	N/A	N/A	N/A		Frame No.1 Push-pull pos. at load	Frame Size Register	RO	RW	RW
5312	LOAD_POSC[2]	54	4	nm	N/A	N/A	N/A		Frame No.2 Push-pull pos. at load	Frame Size Register	RO	RW	RW
5313	LOAD_POSC[3]	54	4	nm	N/A	N/A	N/A		Frame No.3 Push-pull pos. at load	Frame Size Register	RO	RW	RW
5314	LOAD_POSC[4]	54	4	nm	N/A	N/A	N/A		Frame No.4 Push-pull pos. at load	Frame Size Register	RO	RW	RW
5315	LOAD_POSC[5]	54	4	nm	N/A	N/A	N/A		Frame No.5 Push-pull pos. at load	Frame Size Register	RO	RW	RW
5316	LOAD_POSC[6]	54	4	nm	N/A	N/A	N/A		Frame No.6 Push-pull pos. at load	Frame Size Register	RO	RW	RW
5321	UNLOAD_POSC[1]	54	4	nm	N/A	N/A	N/A		Frame No.1 Push-pull pos. at unload	Frame Size Register	RO	RW	RW
5322	UNLOAD_POSC[2]	54	4	nm	N/A	N/A	N/A		Frame No.2 Push-pull pos. at unload	Frame Size Register	RO	RW	RW
5323	UNLOAD_POSC[3]	54	4	nm	N/A	N/A	N/A		Frame No.3 Push-pull pos. at unload	Frame Size Register	RO	RW	RW
5324	UNLOAD_POSC[4]	54	4	nm	N/A	N/A	N/A		Frame No.4 Push-pull pos. at unload	Frame Size Register	RO	RW	RW
5325	UNLOAD_POSC[5]	54	4	nm	N/A	N/A	N/A		Frame No.5 Push-pull pos. at unload	Frame Size Register	RO	RW	RW
5326	UNLOAD_POSC[6]	54	4	nm	N/A	N/A	N/A		Frame No.6 Push-pull pos. at unload	Frame Size Register	RO	RW	RW
5331	FRAME_DIA[1]	54	4	nm	300000000	0	300000000		Frame No.1 Frame diameter	Frame Size Register	RO	RW	RW
5332	FRAME_DIA[2]	54	4	nm	300000000	0	300000000		Frame No.2 Frame diameter	Frame Size Register	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5333	FRAME_DIA[3]	54	4	nm	300000000	0	300000000		Frame No.3 Frame diameter	Frame Size Register	RO	RW	RW
5334	FRAME_DIA[4]	54	4	nm	300000000	0	300000000		Frame No.4 Frame diameter	Frame Size Register	RO	RW	RW
5335	FRAME_DIA[5]	54	4	nm	300000000	0	300000000		Frame No.5 Frame diameter	Frame Size Register	RO	RW	RW
5336	FRAME_DIA[6]	54	4	nm	300000000	0	300000000		Frame No.6 Frame diameter	Frame Size Register	RO	RW	RW
5400	LIGHT_DIR	34	4	%	0	-50	50		Adjustment light level Dir	Alignment Data	RO	RW	RW
5401	LIGHT_OBL	34	4	%	0	-50	50		Adjustment light level Obl	Alignment Data	RO	RW	RW
5402	FOCUS_LONG	34	4	nm	1000000	N/A	N/A		Auto focus stroke by button	Alignment Data	RO	RW	RW
5403	ALU_PIX_HI[0]	34	4	nm	1000	N/A	N/A		Pixel size Hi mag.(Z1)	Alignment Data	RO	RW	RW
5420	ALU_PIX_HI[1]	34	4	nm	1000	N/A	N/A		Pixel size Hi mag.(Z2)	Alignment Data	RO	RW	RW
5404	ALU_PIX_LO	34	4	nm	10000	N/A	N/A		Pixel size Lo mag.	Alignment Data	RO	RW	RW
5405	ALU_MAG_HI[0]	34	4	N/A	7500	N/A	N/A		Microscope magnification (CCD) Hi mag.(Z1)	Alignment Data	RO	RW	RW
5421	ALU_MAG_HI[1]	34	4	N/A	7500	N/A	N/A		Microscope magnification (CCD) Hi mag.(Z2)	Alignment Data	RO	RW	RW
5406	ALU_MAG_LO	34	4	N/A	750	N/A	N/A		Microscope magnification (CCD) Lo mag.	Alignment Data	RO	RW	RW
5407	CCD_SIZE_HI[0]	34	4	nm	7500	N/A	N/A		CCD size Hi mag.(Z1)	Alignment Data	RO	RW	RW
5422	CCD_SIZE_HI[1]	34	4	nm	7500	N/A	N/A		CCD size Hi mag.(Z2)	Alignment Data	RO	RW	RW
5408	CCD_SIZE_LO	34	4	nm	7500	N/A	N/A		CCD size Lo mag.	Alignment Data	RO	RW	RW
5409	ALU_WAIT	34	4	ms	180	N/A	N/A		ALU waiting time	Alignment Data	RO	RW	RW
5410	ALU_Q_MAGIN	34	4	%	20	N/A	N/A		Spiral check Q margin	Alignment Data	RO	RW	RW
5412	KC_NEXT_RET	34	4	times	0	N/A	N/A		Kerf check by target retry	Alignment Data	RO	RW	RW
5413	KC_NEXT_LIN	34	4	lines	0	N/A	N/A		by target retry line	Alignment Data	RO	RW	RW
5414	ALU_CX_HI	34	4	nm	0	N/A	N/A		Microscope center position Hi X	Alignment Data	RO	RW	RW
5415	ALU_CY_HI	34	4	nm	0	N/A	N/A		Microscope center position Hi Y	Alignment Data	RO	RW	RW
5416	ALU_CX_LO	34	4	nm	0	N/A	N/A		Microscope center position Lo X	Alignment Data	RO	RW	RW
5417	ALU_CY_LO	34	4	nm	0	N/A	N/A		Microscope center position Lo Y	Alignment Data	RO	RW	RW
5418	ANGLE_PER	34	4	10^-6deg	50000	N/A	N/A		Theta Permission CH to CH	Alignment Data	RO	RW	RW
5500	SCAN_SPDX	34	4	nm/sec	30000000	N/A	N/A		Scan Speed X	Operation Data Maintenance	RO	RW	RW
5501	SCAN_SPDY	34	4	nm/sec	10000000	N/A	N/A		Scan Speed Y	Operation Data Maintenance	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5502	SCAN_SPDT	34	4	nm/sec	60000000	N/A	N/A		Scan Speed T	Operation Data Maintenance	RO	RW	RW
5503	SCAN_SLOW	34	4	sec	5	1	300		Scan moving time (Low speed)	Operation Data Maintenance	RO	RW	RW
5504	SCAN_MID	34	4	sec	5	1	300		Hi Speed Scan Move Time	Operation Data Maintenance	RO	RW	RW
5505	BLADE_ESC	34	4	nm	100000	0	9000000		Escape Rate Z1	Operation Data Maintenance	RO	RW	RW
5506	BLADE_ESC2	34	4	nm	100000	0	9000000		Escape Rate Z2	Operation Data Maintenance	RO	RW	RW
5507	EXTRA_ESC	34	4	nm	2000000	0	9000000		Extra Escape Rate Z1	Operation Data Maintenance	RO	RW	RW
5508	EXTRA_ESC2	34	4	nm	2000000	0	9000000		Extra Escape Rate Z2	Operation Data Maintenance	RO	RW	RW
5509	EM_CUT_MODE	20	n	N/A	NEXT	NEXT	SAME		Cut Sequence After Z-EM	Operation Data Maintenance	RO	RW	RW
5510	ROOM_X	34	4	nm	6000000	N/A	N/A		Clearance X-axis Start	Operation Data Maintenance	RO	RW	RW
5511	ROOM_Y	34	4	nm	2000000	N/A	N/A		Clearance Y-axis	Operation Data Maintenance	RO	RW	RW
5512	WORK_LIM	34	4	nm	0	N/A	N/A		Thickness Check by Focus Limit	Operation Data Maintenance	RO	RW	RW
5516	PS_NEW_SPD	34	4	nm/sec	N/A	N/A	N/A		New blade initial feed speed	Precut Process	RO	RW	RW
5517	PS_OLD_SPD	34	4	nm/sec	N/A	N/A	N/A		Old blade initial feed speed	Precut Process	RO	RW	RW
5518	PS_RET_SPD	34	4	nm/sec	N/A	N/A	N/A		Reduced speed at re-precut on	Precut Process	RO	RW	RW
5519	PS_MAX_SPD	34	4	nm/sec	N/A	N/A	N/A		Pre-cut end speed	Precut Process	RO	RW	RW
5520	PS_MAX_LIN	34	4	lines	N/A	N/A	N/A		Line of pre-cut	Precut Process	RO	RW	RW
5521	PRE_ID	20	n	N/A	N/A	N/A	N/A		Precut process ID	Precut Process	RO	RW	RW
5522	PSPEC_OLD	34	4	N/A	N/A	N/A	N/A		Used blade spec. No.	Precut Process	RO	RW	RW
5523	PSPEC_NEW	34	4	N/A	N/A	N/A	N/A		New blade spec. No.	Precut Process	RO	RW	RW
5524	PSPEC_RET	34	4	N/A	N/A	N/A	N/A		Precut set during precut Seq decrease	Precut Process	RO	RW	RW
5525	PSPEC_DEP	34	4	nm	N/A	N/A	N/A		Set for work thickness Greater	Precut Process	RO	RW	RW
5526	PSPEC_MODE	20	n	N/A	N/A	N/A	N/A		Precut Mode	Precut Process	RO	RW	RW
5530	PD_LIN[0]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 1 lines	Precut Process	RO	RW	RW
5531	PD_LIN[1]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 2 lines	Precut Process	RO	RW	RW
5532	PD_LIN[2]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 3 lines	Precut Process	RO	RW	RW
5533	PD_LIN[3]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 4 lines	Precut Process	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5534	PD_LIN[4]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 5 lines	Precut Process	RO	RW	RW
5535	PD_LIN[5]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 6 lines	Precut Process	RO	RW	RW
5536	PD_LIN[6]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 7 lines	Precut Process	RO	RW	RW
5537	PD_LIN[7]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 8 lines	Precut Process	RO	RW	RW
5538	PD_LIN[8]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 9 lines	Precut Process	RO	RW	RW
5539	PD_LIN[9]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 10 lines	Precut Process	RO	RW	RW
5540	PD_LIN[10]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 11 lines	Precut Process	RO	RW	RW
5541	PD_LIN[11]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 12 lines	Precut Process	RO	RW	RW
5542	PD_LIN[12]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 13 lines	Precut Process	RO	RW	RW
5543	PD_LIN[13]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 14 lines	Precut Process	RO	RW	RW
5544	PD_LIN[14]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 15 lines	Precut Process	RO	RW	RW
5545	PD_LIN[15]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 16 lines	Precut Process	RO	RW	RW
5546	PD_LIN[16]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 17 lines	Precut Process	RO	RW	RW
5547	PD_LIN[17]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 18 lines	Precut Process	RO	RW	RW
5548	PD_LIN[18]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 19 lines	Precut Process	RO	RW	RW
5549	PD_LIN[19]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 20 lines	Precut Process	RO	RW	RW
5550	PD_LIN[20]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 21 lines	Precut Process	RO	RW	RW
5551	PD_LIN[21]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 22 lines	Precut Process	RO	RW	RW
5552	PD_LIN[22]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 23 lines	Precut Process	RO	RW	RW
5553	PD_LIN[23]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 24 lines	Precut Process	RO	RW	RW
5554	PD_LIN[24]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 25 lines	Precut Process	RO	RW	RW
5555	PD_LIN[25]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 26 lines	Precut Process	RO	RW	RW
5556	PD_LIN[26]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 27 lines	Precut Process	RO	RW	RW
5557	PD_LIN[27]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 28 lines	Precut Process	RO	RW	RW
5558	PD_LIN[28]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 29 lines	Precut Process	RO	RW	RW
5559	PD_LIN[29]	34	4	lines	N/A	N/A	N/A		Precut Data Seq. 30 lines	Precut Process	RO	RW	RW
5560	PD_LEN[0]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 1 Length	Precut Process	RO	RW	RW
5561	PD_LEN[1]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 2 Length	Precut Process	RO	RW	RW
5562	PD_LEN[2]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 3 Length	Precut Process	RO	RW	RW
5563	PD_LEN[3]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 4 Length	Precut Process	RO	RW	RW
5564	PD_LEN[4]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 5 Length	Precut Process	RO	RW	RW
5565	PD_LEN[5]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 6 Length	Precut Process	RO	RW	RW
5566	PD_LEN[6]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 7 Length	Precut Process	RO	RW	RW
5567	PD_LEN[7]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 8 Length	Precut Process	RO	RW	RW
5568	PD_LEN[8]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 9 Length	Precut Process	RO	RW	RW
5569	PD_LEN[9]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 10 Length	Precut Process	RO	RW	RW
5570	PD_LEN[10]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 11 Length	Precut Process	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5571	PD_LEN[11]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 12 Length	Precut Process	RO	RW	RW
5572	PD_LEN[12]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 13 Length	Precut Process	RO	RW	RW
5573	PD_LEN[13]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 14 Length	Precut Process	RO	RW	RW
5574	PD_LEN[14]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 15 Length	Precut Process	RO	RW	RW
5575	PD_LEN[15]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 16 Length	Precut Process	RO	RW	RW
5576	PD_LEN[16]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 17 Length	Precut Process	RO	RW	RW
5577	PD_LEN[17]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 18 Length	Precut Process	RO	RW	RW
5578	PD_LEN[18]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 19 Length	Precut Process	RO	RW	RW
5579	PD_LEN[19]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 20 Length	Precut Process	RO	RW	RW
5580	PD_LEN[20]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 21 Length	Precut Process	RO	RW	RW
5581	PD_LEN[21]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 22 Length	Precut Process	RO	RW	RW
5582	PD_LEN[22]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 23 Length	Precut Process	RO	RW	RW
5583	PD_LEN[23]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 24 Length	Precut Process	RO	RW	RW
5584	PD_LEN[24]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 25 Length	Precut Process	RO	RW	RW
5585	PD_LEN[25]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 26 Length	Precut Process	RO	RW	RW
5586	PD_LEN[26]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 27 Length	Precut Process	RO	RW	RW
5587	PD_LEN[27]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 28 Length	Precut Process	RO	RW	RW
5588	PD_LEN[28]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 29 Length	Precut Process	RO	RW	RW
5589	PD_LEN[29]	34	4	mm	N/A	N/A	N/A		Precut Data Seq. 30 Length	Precut Process	RO	RW	RW
5590	PD_SPD[0]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 1 Feed speed	Precut Process	RO	RW	RW
5591	PD_SPD[1]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 2 Feed speed	Precut Process	RO	RW	RW
5592	PD_SPD[2]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 3 Feed speed	Precut Process	RO	RW	RW
5593	PD_SPD[3]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 4 Feed speed	Precut Process	RO	RW	RW
5594	PD_SPD[4]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 5 Feed speed	Precut Process	RO	RW	RW
5595	PD_SPD[5]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 6 Feed speed	Precut Process	RO	RW	RW
5596	PD_SPD[6]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 7 Feed speed	Precut Process	RO	RW	RW
5597	PD_SPD[7]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 8 Feed speed	Precut Process	RO	RW	RW
5598	PD_SPD[8]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 9 Feed speed	Precut Process	RO	RW	RW
5599	PD_SPD[9]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 10 Feed speed	Precut Process	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5600	PD_SPD[10]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 11 Feed speed	Precut Process	RO	RW	RW
5601	PD_SPD[11]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 12 Feed speed	Precut Process	RO	RW	RW
5602	PD_SPD[12]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 13 Feed speed	Precut Process	RO	RW	RW
5603	PD_SPD[13]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 14 Feed speed	Precut Process	RO	RW	RW
5604	PD_SPD[14]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 15 Feed speed	Precut Process	RO	RW	RW
5605	PD_SPD[15]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 16 Feed speed	Precut Process	RO	RW	RW
5606	PD_SPD[16]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 17 Feed speed	Precut Process	RO	RW	RW
5607	PD_SPD[17]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 18 Feed speed	Precut Process	RO	RW	RW
5608	PD_SPD[18]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 19 Feed speed	Precut Process	RO	RW	RW
5609	PD_SPD[19]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 20 Feed speed	Precut Process	RO	RW	RW
5610	PD_SPD[20]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 21 Feed speed	Precut Process	RO	RW	RW
5611	PD_SPD[21]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 22 Feed speed	Precut Process	RO	RW	RW
5612	PD_SPD[22]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 23 Feed speed	Precut Process	RO	RW	RW
5613	PD_SPD[23]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 24 Feed speed	Precut Process	RO	RW	RW
5614	PD_SPD[24]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 25 Feed speed	Precut Process	RO	RW	RW
5615	PD_SPD[25]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 26 Feed speed	Precut Process	RO	RW	RW
5616	PD_SPD[26]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 27 Feed speed	Precut Process	RO	RW	RW
5617	PD_SPD[27]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 28 Feed speed	Precut Process	RO	RW	RW
5618	PD_SPD[28]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 29 Feed speed	Precut Process	RO	RW	RW
5619	PD_SPD[29]	34	4	nm/sec	N/A	N/A	N/A		Precut Data Seq. 30 Feed speed	Precut Process	RO	RW	RW
5700	ALU_TWX_CH[0]	34	4	Pixel	0	0	512		Window size X Macro	Alignment Data	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5701	ALU_TWX_CH[1]	34	4	Pixel	0	0	512		Window size X CH1	Alignment Data	RO	RO	RO
5702	ALU_TWX_CH[2]	34	4	Pixel	0	0	512		Window size X CH2	Alignment Data	RO	RO	RO
5703	ALU_TWX_CH[3]	34	4	Pixel	0	0	512		Window size X CH3	Alignment Data	RO	RO	RO
5704	ALU_TWX_CH[4]	34	4	Pixel	0	0	512		Window size X CH4	Alignment Data	RO	RO	RO
5710	ALU_TWY_CH[0]	34	4	Pixel	0	0	512		Window size Y Macro	Alignment Data	RO	RO	RO
5711	ALU_TWY_CH[1]	34	4	Pixel	0	0	512		Window size Y CH1	Alignment Data	RO	RO	RO
5712	ALU_TWY_CH[2]	34	4	Pixel	0	0	512		Window size Y CH2	Alignment Data	RO	RO	RO
5713	ALU_TWY_CH[3]	34	4	Pixel	0	0	512		Window size Y CH3	Alignment Data	RO	RO	RO
5714	ALU_TWY_CH[4]	34	4	Pixel	0	0	512		Window size Y CH4	Alignment Data	RO	RO	RO
5720	ALU_DIR_CH[0]	34	4	%	0	0	100		Light level dir Macro	Alignment Data	RO	RW	RW
5721	ALU_DIR_CH[1]	34	4	%	0	0	100		Light level dir CH1	Alignment Data	RO	RW	RW
5722	ALU_DIR_CH[2]	34	4	%	0	0	100		Light level dir CH2	Alignment Data	RO	RW	RW
5723	ALU_DIR_CH[3]	34	4	%	0	0	100		Light level dir CH3	Alignment Data	RO	RW	RW
5724	ALU_DIR_CH[4]	34	4	%	0	0	100		Light level dir CH4	Alignment Data	RO	RW	RW
5730	ALU_OBL_CH[0]	34	4	%	0	0	100		Light level obl Macro	Alignment Data	RO	RW	RW
5731	ALU_OBL_CH[1]	34	4	%	0	0	100		Light level obl CH1	Alignment Data	RO	RW	RW
5732	ALU_OBL_CH[2]	34	4	%	0	0	100		Light level obl CH2	Alignment Data	RO	RW	RW
5733	ALU_OBL_CH[3]	34	4	%	0	0	100		Light level obl CH3	Alignment Data	RO	RW	RW
5734	ALU_OBL_CH[4]	34	4	%	0	0	100		Light level obl CH4	Alignment Data	RO	RW	RW
5740	FOCUS_OFFSET	34	4	nm	0	0	5000000		Focus offset	Alignment Data	RO	RW	RW
5741	DEV_2FLUIDS	20	n	N/A	YES	NO	YES		Atomizing nozzle for wheel cover	Device Data	RO	RW	RW
5743	IS_SUB_FIRST[1]	20	n	N/A	N/A	NO1	AUTO		Cut start No. CH1	Sub Index Data	RO	RW	RW
5744	IS_SUB_FIRST[2]	20	n	N/A	N/A	NO1	AUTO		Cut start No. CH2	Sub Index Data (CH2)	RO	RW	RW
5745	IS_SUB_FIRST[3]	20	n	N/A	N/A	NO1	AUTO		Cut start No. CH3	Sub Index Data (CH3)	RO	RW	RW
5746	IS_SUB_FIRST[4]	20	n	N/A	N/A	NO1	AUTO		Cut start No. CH4	Sub Index Data (CH4)	RO	RW	RW
5752	CH1_HEI2[0]	54	4	nm	0	0	5000000		CH1 Height2	Device Data	RO	RW	RW
5753	CH1_HEI2[1]	54	4	nm	0	0	5000000		CH1 Height2 No.2	Sub Index Data	RO	RW	RW
5754	CH1_HEI2[2]	54	4	nm	0	0	5000000		CH1 Height2 No.3	Sub Index Data	RO	RW	RW
5755	CH1_HEI2[3]	54	4	nm	0	0	5000000		CH1 Height2 No.4	Sub Index Data	RO	RW	RW
5756	CH1_HEI2[4]	54	4	nm	0	0	5000000		CH1 Height2 No.5	Sub Index Data	RO	RW	RW
5757	CH1_HEI2[5]	54	4	nm	0	0	5000000		CH1 Height2 No.6	Sub Index Data	RO	RW	RW
5758	CH1_HEI2[6]	54	4	nm	0	0	5000000		CH1 Height2 No.7	Sub Index Data	RO	RW	RW
5759	CH1_HEI2[7]	54	4	nm	0	0	5000000		CH1 Height2 No.8	Sub Index Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5762	CH2_HEI2[0]	54	4	nm	0	0	5000000		CH2 Height2	Sub Index Data (CH2)	RO	RW	RW
5763	CH2_HEI2[1]	54	4	nm	0	0	5000000		CH2 Height2 No.2	Sub Index Data (CH2)	RO	RW	RW
5764	CH2_HEI2[2]	54	4	nm	0	0	5000000		CH2 Height2 No.3	Sub Index Data (CH2)	RO	RW	RW
5765	CH2_HEI2[3]	54	4	nm	0	0	5000000		CH2 Height2 No.4	Sub Index Data (CH2)	RO	RW	RW
5766	CH2_HEI2[4]	54	4	nm	0	0	5000000		CH2 Height2 No.5	Sub Index Data (CH2)	RO	RW	RW
5767	CH2_HEI2[5]	54	4	nm	0	0	5000000		CH2 Height2 No.6	Sub Index Data (CH2)	RO	RW	RW
5768	CH2_HEI2[6]	54	4	nm	0	0	5000000		CH2 Height2 No.7	Sub Index Data (CH2)	RO	RW	RW
5769	CH2_HEI2[7]	54	4	nm	0	0	5000000		CH2 Height2 No.8	Sub Index Data (CH2)	RO	RW	RW
5772	CH3_HEI2[0]	54	4	nm	0	0	5000000		CH3 Height2 No.1	Sub Index Data (CH3)	RO	RW	RW
5773	CH3_HEI2[1]	54	4	nm	0	0	5000000		CH3 Height2 No.2	Sub Index Data (CH3)	RO	RW	RW
5774	CH3_HEI2[2]	54	4	nm	0	0	5000000		CH3 Height2 No.3	Sub Index Data (CH3)	RO	RW	RW
5775	CH3_HEI2[3]	54	4	nm	0	0	5000000		CH3 Height2 No.4	Sub Index Data (CH3)	RO	RW	RW
5776	CH3_HEI2[4]	54	4	nm	0	0	5000000		CH3 Height2 No.5	Sub Index Data (CH3)	RO	RW	RW
5777	CH3_HEI2[5]	54	4	nm	0	0	5000000		CH3 Height2 No.6	Sub Index Data (CH3)	RO	RW	RW
5778	CH3_HEI2[6]	54	4	nm	0	0	5000000		CH3 Height2 No.7	Sub Index Data (CH3)	RO	RW	RW
5779	CH3_HEI2[7]	54	4	nm	0	0	5000000		CH3 Height2 No.8	Sub Index Data (CH3)	RO	RW	RW
5782	CH4_HEI2[0]	54	4	nm	0	0	5000000		CH4 Height2 No.1	Sub Index Data (CH4)	RO	RW	RW
5783	CH4_HEI2[1]	54	4	nm	0	0	5000000		CH4 Height2 No.2	Sub Index Data (CH4)	RO	RW	RW
5784	CH4_HEI2[2]	54	4	nm	0	0	5000000		CH4 Height2 No.3	Sub Index Data (CH4)	RO	RW	RW
5785	CH4_HEI2[3]	54	4	nm	0	0	5000000		CH4 Height2 No.4	Sub Index Data (CH4)	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5786	CH4_HEI2[4]	54	4	nm	0	0	5000000		CH4 Height2 No.5	Sub Index Data (CH4)	RO	RW	RW
5787	CH4_HEI2[5]	54	4	nm	0	0	5000000		CH4 Height2 No.6	Sub Index Data (CH4)	RO	RW	RW
5788	CH4_HEI2[6]	54	4	nm	0	0	5000000		CH4 Height2 No.7	Sub Index Data (CH4)	RO	RW	RW
5789	CH4_HEI2[7]	54	4	nm	0	0	5000000		CH4 Height2 No.8	Sub Index Data (CH4)	RO	RW	RW
5792	KC_Z2_EVERY	20	n	N/A	TIMING	NO	TIMING	"LINE" "TIMING" "NO"	Z2 check mode (every)	Kerf Check Data	RO	RW	RW
5793	KC_Z2_FIRST	20	n	N/A	TIMING	NO	TIMING	"LINE" "TIMING" "NO"	Z2 check freq. within a wafer 1st	Kerf Check Data	RO	RW	RW
5794	KC_Z2_NEXT	20	n	N/A	TIMING	NO	TIMING	"LINE" "TIMING" "NO"	Z2 check freq. within a wafer Every	Kerf Check Data	RO	RW	RW
5795	KM_CENTER	34	4	nm	0	0	10000000		Kerf Check Mask Center Z1	Kerf Check Data2	RO	RW	RW
5796	KM2CENTER	34	4	nm	0	0	10000000		Kerf Check Mask Center Z2	Kerf Check Data2	RO	RW	RW
5797	KM_HEIGHT	34	4	nm	0	0	10000000		Kerf Check Mask Outside Z1	Kerf Check Data2	RO	RW	RW
5798	KM2HEIGHT	34	4	nm	0	0	10000000		Kerf Check Mask Outside Z2	Kerf Check Data2	RO	RW	RW
5799	OP_KERFC	34	4	N/A	0	0	3	1=Standard 2=Reflection	Algorithm	Kerf Check Data2	RO	RW	RW
5801	ARMU_RET	10	1	Times	1	0	9		Upper arm Retry No.	Function Data Maintenance	RO	RW	RW
5802	ARML_RET	10	1	Times	1	0	9		Lower arm Retry No.	Function Data Maintenance	RO	RW	RW
5803	CLNWET	20	n	N/A	NO	NO	YES		Keep work wet during waiting cleaning	Function Data Maintenance	RO	RW	RW
5804	KEY_LAYOUT	20	n	N/A	QWERTY	ABC	QWERTY		Layout of keyboard	Function Data Maintenance	RO	RW	RW
5805	THAIR_PASS	20	n	N/A	NO	NO	YES		Tape cut hairline adj.	Function Data Maintenance	RO	RW	RW
5810	ROOM_X_END	34	4	nm	3000000	N/A	N/A		Clearance X-axis End	Operation Data Maintenance	RO	RW	RW
5811	ION_UNLOAD_SPD	54	4	nm/sec	N/A	N/A	N/A		Ionizer Unload speed	Operation Data Maintenance	RO	RW	RW
5812	ION_WAIT_SEC	34	4	sec	0	0	999		Ionizer Wait time	Operation Data Maintenance	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5813	UNLOAD_ADJE[1]	54	4	nm	0	N/A	N/A		Frame No.1 Elevator pos. at unload	Frame Size Register	RO	RW	RW
5814	UNLOAD_ADJE[2]	54	4	nm	0	N/A	N/A		Frame No.2 Elevator pos. at unload	Frame Size Register	RO	RW	RW
5815	UNLOAD_ADJE[3]	54	4	nm	0	N/A	N/A		Frame No.3 Elevator pos. at unload	Frame Size Register	RO	RW	RW
5816	UNLOAD_ADJE[4]	54	4	nm	0	N/A	N/A		Frame No.4 Elevator pos. at unload	Frame Size Register	RO	RW	RW
5817	UNLOAD_ADJE[5]	54	4	nm	0	N/A	N/A		Frame No.5 Elevator pos. at unload	Frame Size Register	RO	RW	RW
5818	UNLOAD_ADJE[6]	54	4	nm	0	N/A	N/A		Frame No.6 Elevator pos. at unload	Frame Size Register	RO	RW	RW
5819	CLOSE_POSF[1]	54	4	nm	0	N/A	N/A		Frame No.1 Frame centering pos.	Frame Size Register	RO	RW	RW
5820	CLOSE_POSF[2]	54	4	nm	0	N/A	N/A		Frame No.2 Frame centering pos.	Frame Size Register	RO	RW	RW
5821	CLOSE_POSF[3]	54	4	nm	0	N/A	N/A		Frame No.3 Frame centering pos.	Frame Size Register	RO	RW	RW
5822	CLOSE_POSF[4]	54	4	nm	0	N/A	N/A		Frame No.4 Frame centering pos.	Frame Size Register	RO	RW	RW
5823	CLOSE_POSF[5]	54	4	nm	0	N/A	N/A		Frame No.5 Frame centering pos.	Frame Size Register	RO	RW	RW
5824	CLOSE_POSF[6]	54	4	nm	0	N/A	N/A		Frame No.6 Frame centering pos.	Frame Size Register	RO	RW	RW
5825	DEFAULT_DIR	34	4	%	0	0	100		Default light level Dir	Alignment Data	RO	RO	RO
5826	DEFAULT_OBL	34	4	%	0	0	100		Default light level Obl	Alignment Data	RO	RO	RO
5827	MANU_THETA_SPDX	54	4	nm/sec	N/A	N/A	N/A		X-axis speed by Theta adjustment button	Alignment Data	RO	RW	RW
5828	DEV_DIR	20	n	N/A	N/A	N/A	N/A		Device data directory	Device Data	RO	RO	RO
5829	TMP_DEV_NO	20	n	N/A	N/A	N/A	N/A		Device No.	Device Data	RO	RO	RO
5832	SETUP_POST	54	4	10~-6deg	0	SETUP_POS TS	SETUP_POS TE		Theta-Rotation for now position	Setup Data2	RO	RO	RO
5835	COM_CLN	20	n	N/A	N/A	NO	YES		Common cleaning data	Device Data	RO	RW	RW
5850	UNIT_DRS	20	n	N/A	N/A	mm	inch		Unit	Blade Dress Program	RO	RO	RO
5851	DRS_AXIS	20	n	N/A	N/A	Z1	Z1Z2		AXIS	Blade Dress Program	RO	RO	RO
5852	DRS_CUT_MODE	20	n	N/A	N/A	A	B_ZKEEP	"A" "B" "A_UP" "B_ZKEEP"	Cut Mode	Blade Dress Program	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5853	DRS_TOTAL_LIN	34	4	lines	N/A	N/A	N/A		# Of Cut (0/All)	Blade Dress Program	RO	RO	RO
5854	DRS_WORK_SIZE1	34	4	nm	N/A	N/A	N/A		X-Stroke	Blade Dress Program	RO	RO	RO
5855	DRS_WORK_SIZE2	34	4	nm	N/A	N/A	N/A		Y-Stroke	Blade Dress Program	RO	RO	RO
5856	DRS_HEI	34	4	nm	N/A	N/A	N/A		Blade Height Z1	Blade Dress Program	RO	RO	RO
5857	DRS_HEI2	34	4	nm	N/A	N/A	N/A		Blade Height Z2	Blade Dress Program	RO	RO	RO
5858	DRS_INDEX	34	4	nm	N/A	N/A	N/A		Index	Blade Dress Program	RO	RO	RO
5859	DRS_LIN[0]	34	4	lines	N/A	N/A	N/A		Blade Dress Program Seq.1 lines	Blade Dress Program	RO	RO	RO
5860	DRS_LIN[1]	34	4	lines	N/A	N/A	N/A		Blade Dress Program Seq.2 lines	Blade Dress Program	RO	RO	RO
5861	DRS_LIN[2]	34	4	lines	N/A	N/A	N/A		Blade Dress Program Seq.3 lines	Blade Dress Program	RO	RO	RO
5862	DRS_LIN[3]	34	4	lines	N/A	N/A	N/A		Blade Dress Program Seq.4 lines	Blade Dress Program	RO	RO	RO
5863	DRS_LIN[4]	34	4	lines	N/A	N/A	N/A		Blade Dress Program Seq.5 lines	Blade Dress Program	RO	RO	RO
5864	DRS_LIN[5]	34	4	lines	N/A	N/A	N/A		Blade Dress Program Seq.6 lines	Blade Dress Program	RO	RO	RO
5865	DRS_LIN[6]	34	4	lines	N/A	N/A	N/A		Blade Dress Program Seq.7 lines	Blade Dress Program	RO	RO	RO
5866	DRS_LIN[7]	34	4	lines	N/A	N/A	N/A		Blade Dress Program Seq.8 lines	Blade Dress Program	RO	RO	RO
5867	DRS_LIN[8]	34	4	lines	N/A	N/A	N/A		Blade Dress Program Seq.9 lines	Blade Dress Program	RO	RO	RO
5868	DRS_LIN[9]	34	4	lines	N/A	N/A	N/A		Blade Dress Program Seq.10 lines	Blade Dress Program	RO	RO	RO
5869	DRS_SPD[0]	34	4	nm/sec	N/A	N/A	N/A		Blade Dress Program Seq.1 Feed speed	Blade Dress Program	RO	RO	RO
5870	DRS_SPD[1]	34	4	nm/sec	N/A	N/A	N/A		Blade Dress Program Seq.2 Feed speed	Blade Dress Program	RO	RO	RO
5871	DRS_SPD[2]	34	4	nm/sec	N/A	N/A	N/A		Blade Dress Program Seq.3 Feed speed	Blade Dress Program	RO	RO	RO
5872	DRS_SPD[3]	34	4	nm/sec	N/A	N/A	N/A		Blade Dress Program Seq.4 Feed speed	Blade Dress Program	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
5873	DRS_SPD[4]	34	4	nm/sec	N/A	N/A	N/A		Blade Dress Program Seq.5 Feed speed	Blade Dress Program	RO	RO	RO
5874	DRS_SPD[5]	34	4	nm/sec	N/A	N/A	N/A		Blade Dress Program Seq.6 Feed speed	Blade Dress Program	RO	RO	RO
5875	DRS_SPD[6]	34	4	nm/sec	N/A	N/A	N/A		Blade Dress Program Seq.7 Feed speed	Blade Dress Program	RO	RO	RO
5876	DRS_SPD[7]	34	4	nm/sec	N/A	N/A	N/A		Blade Dress Program Seq.8 Feed speed	Blade Dress Program	RO	RO	RO
5877	DRS_SPD[8]	34	4	nm/sec	N/A	N/A	N/A		Blade Dress Program Seq.9 Feed speed	Blade Dress Program	RO	RO	RO
5878	DRS_SPD[9]	34	4	nm/sec	N/A	N/A	N/A		Blade Dress Program Seq.10 Feed speed	Blade Dress Program	RO	RO	RO
6000	OP_KERFCNT	20	n	N/A	N/A	NO	YES		Kerf center alignment	Alignment Special Data	RO	RO	RO
6500	UV_THRSHLD[0]	54	4	uV	N/A	0	999999999		UV Sensor lower limit 1 DFD6360 only	UV Sensor Adjustment	RO	RW	RW
6501	UV_THRSHLD[1]	54	4	uV	N/A	0	999999999		UV Sensor lower limit 2 DFD6360 only	UV Sensor Adjustment	RO	RW	RW
6502	UV_THRSHLD[2]	54	4	uV	N/A	0	999999999		UV Sensor lower limit 3 DFD6360 only	UV Sensor Adjustment	RO	RW	RW
6503	UV_THRSHLD[3]	54	4	uV	N/A	0	999999999		UV Sensor lower limit 4 DFD6360 only	UV Sensor Adjustment	RO	RW	RW
6504	UV_THRSHLD[4]	54	4	uV	N/A	0	999999999		UV Sensor lower limit 5 DFD6360 only	UV Sensor Adjustment	RO	RW	RW
6505	UV_THRSHLD[5]	54	4	uV	N/A	0	999999999		UV Sensor lower limit 6 DFD6360 only	UV Sensor Adjustment	RO	RW	RW
6506	UV_THRSHLD[6]	54	4	uV	N/A	0	999999999		UV Sensor lower limit 7 DFD6360 only	UV Sensor Adjustment	RO	RW	RW
6507	UV_THRSHLD[7]	54	4	uV	N/A	0	999999999		UV Sensor lower limit 8 DFD6360 only	UV Sensor Adjustment	RO	RW	RW
6508	UV_THRSHLD[8]	54	4	uV	N/A	0	999999999		UV Sensor lower limit 9 DFD6360 only	UV Sensor Adjustment	RO	RW	RW
6509	UV_THRSHLD[9]	54	4	uV	N/A	0	999999999		UV Sensor lower limit 10 DFD6360 only	UV Sensor Adjustment	RO	RW	RW
6510	UV_TIMING	20	n	N/A	N/A	UV	SYSINIT	"UV" "FULLAUTO" "SYSINIT"	UV Lamp ON Timing	UV Sensor Adjustment	RO	RW	RW
6512	HP_NOZU_X1	34	4	nm	N/A	N/A	N/A		Nozzle position X Z1	Special Blade Nozzle Position	RO	RW	RW
6513	HP_NOZU_Y1	34	4	nm	N/A	N/A	N/A		Nozzle position Y Front Z1	Special Blade Nozzle Position	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
6514	HP_NOZU_Y1B	34	4	nm	N/A	N/A	N/A		Nozzle position Y Rear Z1	Special Blade Nozzle Position	RO	RW	RW
6515	HP_NOZU_X2	34	4	nm	N/A	N/A	N/A		Nozzle position X Z2	Special Blade Nozzle Position	RO	RW	RW
6516	HP_NOZU_Y2	34	4	nm	N/A	N/A	N/A		Nozzle position Y Front Z2	Special Blade Nozzle Position	RO	RW	RW
6517	HP_NOZU_Y2B	34	4	nm	N/A	N/A	N/A		Nozzle position Y Rear Z2	Special Blade Nozzle Position	RO	RW	RW
6519	CHG_ACCEL_DIS	54	4	nm	N/A	N/A	N/A		The acceleration distance of the feed speed	User Special Data	RO	RW	RW
6520	CHG_DECEL_DIS	54	4	nm	N/A	N/A	N/A		The deceleration distance of the feed speed	User Special Data	RO	RW	RW
6521	BEFORE_ACCEL_SPD	54	4	nm/sec	N/A	N/A	N/A		Feed speed before acceleration	User Special Data	RO	RW	RW
6522	BEFORE_ACCEL_DIS	54	4	nm	N/A	N/A	N/A		Distance before acceleration	User Special Data	RO	RW	RW
6523	AFTER_DECEL_SPD	54	4	nm/sec	N/A	N/A	N/A		Feed speed after deceleration	User Special Data	RO	RW	RW
6524	AFTER_DECEL_DIS	54	4	nm	N/A	N/A	N/A		Distance after deceleration	User Special Data	RO	RW	RW
6525	FRAME_JUMP	20	n	N/A	NO	NO	YES		Frame jump	Device Data	RO	RW	RW
6538	AVAL_THRES_L[34]	54	4	uW/cm2	N/A	0	999999		UV Sensor lower limit 1 excluding DFD6360	UV Sensor Adjustment	RO	RW	RW
6539	AVAL_THRES_L[35]	54	4	uW/cm2	N/A	0	999999		UV Sensor lower limit 2 excluding DFD6360	UV Sensor Adjustment	RO	RW	RW
6540	AVAL_THRES_L[36]	54	4	uW/cm2	N/A	0	999999		UV Sensor lower limit 3 excluding DFD6360	UV Sensor Adjustment	RO	RW	RW
6541	AVAL_THRES_L[37]	54	4	uW/cm2	N/A	0	999999		UV Sensor lower limit 4 excluding DFD6360	UV Sensor Adjustment	RO	RW	RW
6542	AVAL_THRES_L[38]	54	4	uW/cm2	N/A	0	999999		UV Sensor lower limit 5 excluding DFD6360	UV Sensor Adjustment	RO	RW	RW
6543	AVAL_THRES_L[39]	54	4	uW/cm2	N/A	0	999999		UV Sensor lower limit 6 excluding DFD6360	UV Sensor Adjustment	RO	RW	RW
6544	AVAL_THRES_L[40]	54	4	uW/cm2	N/A	0	999999		UV Sensor lower limit 7 excluding DFD6360	UV Sensor Adjustment	RO	RW	RW
6545	AVAL_THRES_L[41]	54	4	uW/cm2	N/A	0	999999		UV Sensor lower limit 8 excluding DFD6360	UV Sensor Adjustment	RO	RW	RW
6546	AVAL_THRES_L[42]	34	4	hPa	N/A	-999	0		Jig vacuum sensor lower limit	Sensor Threshold Data	RO	RW	RW
6547	AVAL_THRES_L[43]	34	4	hPa	N/A	-999	0		Vacuum pump sensor lower limit	Sensor Threshold Data	RO	RW	RW
6548	AVAL_THRES_L[44]	54	4	uW/cm2	N/A	0	999999		UV Sensor lower limit 11 DFD6361 only	UV Sensor Adjustment	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
6549	AVAL_THRES_L[45]	54	4	uW/cm2	N/A	0	999999		UV Sensor lower limit 12 DFD6361 only	UV Sensor Adjustment	RO	RW	RW
6601	FLOW_SET[0]	54	4	mL/min	N/A	0	4000		Flow setting Blade cooler Z1	Device Data	RO	RW	RW
6602	FLOW_SET[1]	54	4	mL/min	N/A	0	4000		Flow setting Blade cooler Rear Z1	Device Data	RO	RW	RW
6603	FLOW_SET[2]	54	4	mL/min	N/A	0	4000		Flow setting Shower Z1	Device Data	RO	RW	RW
6604	FLOW_SET[3]	54	4	mL/min	N/A	0	4000		Flow setting Spray Z1	Device Data	RO	RW	RW
6605	FLOW_SET[4]	54	4	mL/min	N/A	0	4000		Flow setting Blade cooler Z2	Device Data	RO	RW	RW
6606	FLOW_SET[5]	54	4	mL/min	N/A	0	4000		Flow setting Blade cooler Rear Z2	Device Data	RO	RW	RW
6607	FLOW_SET[6]	54	4	mL/min	N/A	0	4000		Flow setting Shower Z2	Device Data	RO	RW	RW
6608	FLOW_SET[7]	54	4	mL/min	N/A	0	4000		Flow setting Spray Z2	Device Data	RO	RW	RW
6609	FLOW_ERR[0]	54	4	mL/min	N/A	0	4000		Lower limit Blade cooler Z1	Device Data	RO	RW	RW
6610	FLOW_ERR[1]	54	4	mL/min	N/A	0	4000		Lower limit Blade cooler Rear Z1	Device Data	RO	RW	RW
6611	FLOW_ERR[2]	54	4	mL/min	N/A	0	4000		Lower limit Shower Z1	Device Data	RO	RW	RW
6612	FLOW_ERR[3]	54	4	mL/min	N/A	0	4000		Lower limit Spray Z1	Device Data	RO	RW	RW
6613	FLOW_ERR[4]	54	4	mL/min	N/A	0	4000		Lower limit Blade cooler Z2	Device Data	RO	RW	RW
6614	FLOW_ERR[5]	54	4	mL/min	N/A	0	4000		Lower limit Blade cooler Rear Z2	Device Data	RO	RW	RW
6615	FLOW_ERR[6]	54	4	mL/min	N/A	0	4000		Lower limit Shower Z2	Device Data	RO	RW	RW
6616	FLOW_ERR[7]	54	4	mL/min	N/A	0	4000		Lower limit Spray Z2	Device Data	RO	RW	RW
6617	FLOW_COM_SET[0]	54	4	mL/min	N/A	0	4000		Flow setting Blade cooler Z1	Water Program Data Maintenance	RO	RW	RW
6618	FLOW_COM_SET[1]	54	4	mL/min	N/A	0	4000		Flow setting Blade cooler Rear Z1	Water Program Data Maintenance	RO	RW	RW
6619	FLOW_COM_SET[2]	54	4	mL/min	N/A	0	4000		Flow setting Shower Z1	Water Program Data Maintenance	RO	RW	RW
6620	FLOW_COM_SET[3]	54	4	mL/min	N/A	0	4000		Flow setting Spray Z1	Water Program Data Maintenance	RO	RW	RW
6621	FLOW_COM_SET[4]	54	4	mL/min	N/A	0	4000		Flow setting Blade cooler Z2	Water Program Data Maintenance	RO	RW	RW
6622	FLOW_COM_SET[5]	54	4	mL/min	N/A	0	4000		Flow setting Blade cooler Rear Z2	Water Program Data Maintenance	RO	RW	RW
6623	FLOW_COM_SET[6]	54	4	mL/min	N/A	0	4000		Flow setting Shower Z2	Water Program Data Maintenance	RO	RW	RW
6624	FLOW_COM_SET[7]	54	4	mL/min	N/A	0	4000		Flow setting Spray Z2	Water Program Data Maintenance	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
6625	FLOW_COM_ERR[0]	54	4	mL/min	N/A	0	4000		Lower limit Blade cooler Z1	Water Program Data Maintenance	RO	RW	RW
6626	FLOW_COM_ERR[1]	54	4	mL/min	N/A	0	4000		Lower limit Blade cooler Rear Z1	Water Program Data Maintenance	RO	RW	RW
6627	FLOW_COM_ERR[2]	54	4	mL/min	N/A	0	4000		Lower limit Shower Z1	Water Program Data Maintenance	RO	RW	RW
6628	FLOW_COM_ERR[3]	54	4	mL/min	N/A	0	4000		Lower limit Spray Z1	Water Program Data Maintenance	RO	RW	RW
6629	FLOW_COM_ERR[4]	54	4	mL/min	N/A	0	4000		Lower limit Blade cooler Z2	Water Program Data Maintenance	RO	RW	RW
6630	FLOW_COM_ERR[5]	54	4	mL/min	N/A	0	4000		Lower limit Blade cooler Rear Z2	Water Program Data Maintenance	RO	RW	RW
6631	FLOW_COM_ERR[6]	54	4	mL/min	N/A	0	4000		Lower limit Shower Z2	Water Program Data Maintenance	RO	RW	RW
6632	FLOW_COM_ERR[7]	54	4	mL/min	N/A	0	4000		Lower limit Spray Z2	Water Program Data Maintenance	RO	RW	RW
6633	AVAL_THRES_L[0]	54	4	kPa	N/A	N/A	N/A		Main Air Pressure Lower limit	Sensor Threshold Data	RO	RO	RO
6634	AVAL_THRES_L[1]	54	4	kPa	N/A	N/A	N/A		Clean Air Pressure Lower limit	Sensor Threshold Data	RO	RW	RW
6635	AVAL_THRES_L[2]	54	4	kPa	N/A	N/A	N/A		Water Pressure Lower limit	Sensor Threshold Data	RO	RW	RW
6636	AVAL_THRES_L[3]	34	4	hPa	N/A	N/A	N/A		C/T Work Vacuum Lower limit	Sensor Threshold Data	RO	RW	RW
6637	AVAL_THRES_L[4]	34	4	hPa	N/A	N/A	N/A		S/T Work Vacuum Lower limit	Sensor Threshold Data	RO	RW	RW
6638	AVAL_THRES_L[5]	54	4	100kPa	N/A	N/A	N/A		High Pressure Pump Lower limit	Sensor Threshold Data	RO	RW	RW
6639	AVAL_THRES_L[6]	34	4	hPa	N/A	N/A	N/A		C/T Table Vacuum Lower limit	Sensor Threshold Data	RO	RW	RW
6640	AVAL_THRES_L[7]	34	4	hPa	N/A	N/A	N/A		Upper Arm Vacuum Lower limit	Sensor Threshold Data	RO	RW	RW
6641	AVAL_THRES_L[8]	34	4	hPa	N/A	N/A	N/A		Lower Arm Vacuum Lower limit	Sensor Threshold Data	RO	RW	RW
6642	AVAL_THRES_L[9]	54	4	%	N/A	N/A	N/A		BBD Level Z1 Lower limit	Sensor Threshold Data	RO	RO	RO
6643	AVAL_THRES_L[10]	54	4	%	N/A	N/A	N/A		BBD Level Z2 Lower limit	Sensor Threshold Data	RO	RO	RO
6644	AVAL_THRES_L[11]	54	4	mA	N/A	N/A	N/A		Spindle Current Z1 Lower limit	Sensor Threshold Data	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
6645	AVAL_THRES_L[12]	54	4	/min	N/A	N/A	N/A		Spindle Rev. Z1 Lower limit	Sensor Threshold Data	RO	RO	RO
6646	AVAL_THRES_L[13]	54	4	mA	N/A	N/A	N/A		Spindle Current Z2 Lower limit	Sensor Threshold Data	RO	RO	RO
6647	AVAL_THRES_L[14]	54	4	/min	N/A	N/A	N/A		Spindle Rev. Z2 Lower limit	Sensor Threshold Data	RO	RO	RO
6648	AVAL_THRES_L[15]	54	4	mV	N/A	N/A	N/A		NCS Level Z1 Lower limit	Sensor Threshold Data	RO	RO	RO
6649	AVAL_THRES_L[16]	54	4	mV	N/A	N/A	N/A		NCS Level Z2 Lower limit	Sensor Threshold Data	RO	RO	RO
6650	AVAL_THRES_L[17]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle Flow Rate Z1 Lower limit	Sensor Threshold Data	RO	RO	RO
6651	AVAL_THRES_L[18]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle (Rear) Flow Rate Z1 Lower limit	Sensor Threshold Data	RO	RO	RO
6652	AVAL_THRES_L[19]	54	4	mL/min	N/A	N/A	N/A		Shower Nozzle Flow Rate Z1 Lower limit	Sensor Threshold Data	RO	RO	RO
6653	AVAL_THRES_L[20]	54	4	mL/min	N/A	N/A	N/A		Spray Nozzle Flow Rate Z1 Lower limit	Sensor Threshold Data	RO	RO	RO
6654	AVAL_THRES_L[21]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle Flow Rate Z2 Lower limit	Sensor Threshold Data	RO	RO	RO
6655	AVAL_THRES_L[22]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle (Rear) Flow Rate Z2 Lower limit	Sensor Threshold Data	RO	RO	RO
6656	AVAL_THRES_L[23]	54	4	mL/min	N/A	N/A	N/A		Shower Nozzle Flow Rate Z2 Lower limit	Sensor Threshold Data	RO	RO	RO
6657	AVAL_THRES_L[24]	54	4	mL/min	N/A	N/A	N/A		Spray Nozzle Flow Rate Z2 Lower limit	Sensor Threshold Data	RO	RO	RO
6658	AVAL_THRES_L[25]	54	4	0.1degC	N/A	N/A	N/A		Holder Upper Temp Lower limit	Sensor Threshold Data	RO	RW	RW
6659	AVAL_THRES_L[26]	54	4	0.1degC	N/A	N/A	N/A		Holder Lower Temp Lower limit	Sensor Threshold Data	RO	RW	RW
6660	AVAL_THRES_L[27]	54	4	0.1degC	N/A	N/A	N/A		NCS Z1 Temp Lower limit	Sensor Threshold Data	RO	RW	RW
6661	AVAL_THRES_L[28]	54	4	0.1degC	N/A	N/A	N/A		NCS Z2 Temp Lower limit	Sensor Threshold Data	RO	RW	RW
6662	AVAL_THRES_L[29]	54	4	0.1degC	N/A	N/A	N/A		Column Temp Lower limit	Sensor Threshold Data	RO	RW	RW
6663	AVAL_THRES_L[30]	54	4	0.1degC	N/A	N/A	N/A		Table Base Temp Lower limit	Sensor Threshold Data	RO	RW	RW
6664	AVAL_THRES_L[31]	54	4	0.1degC	N/A	N/A	N/A		Theta Base Temp Lower limit	Sensor Threshold Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
6665	AVAL_THRES_L[32]	54	4	0.1degC	N/A	N/A	N/A		Cutting Water Temp Lower limit	Sensor Threshold Data	RO	RW	RW
6666	AVAL_THRES_L[33]	54	4	kPa	N/A	N/A	N/A		Atomizing Nozzle Clean air Press.(S/T) Lower limit	Sensor Threshold Data	RO	RW	RW
6667	AVAL_THRES_L[46]	54	4	mL	N/A	N/A	N/A		CO2inj. TotalFlow Lower limit	Sensor Threshold Data	RO	RO	RO
6668	AVAL_THRES_L[47]	54	4	kOhm cm	N/A	N/A	N/A		CO2inj. Resistivity Lower limit	Sensor Threshold Data	RO	RW	RW
6669	AVAL_THRES_L[48]	34	4	hPa	N/A	N/A	N/A		Work vacuum B pressure Lower limit	Sensor Threshold Data	RO	RW	RW
14102	CSP_LINE_N[1]	20	n	N/A	NO	NO	2_POINT	"NO" "1_POINT" "2_POINT" "ALL" "END_END"	Search position CH1	Measuring Alignment Data	RO	RW	RW
14103	CSP_LINE_N[2]	20	n	N/A	NO	NO	2_POINT	"NO" "1_POINT" "2_POINT" "ALL" "END_END" "USE_CH1" "USECH1S" "USECH1C"	Search position CH2	Measuring Alignment Data	RO	RW	RW
14104	CSP_LINE_N[3]	20	n	N/A	NO	NO	2_POINT	"NO" "1_POINT" "2_POINT" "ALL" "END_END" "USE_CH2" "USECH2S" "USECH2C"	Search position CH3	Measuring Alignment Data	RO	RW	RW
14105	CSP_LINE_N[4]	20	n	N/A	NO	NO	2_POINT	"NO" "1_POINT" "2_POINT" "ALL" "END_END" "USE_CH3" "USECH3S" "USECH3C"	Search position CH4	Measuring Alignment Data	RO	RW	RW
14111	ALI_PATRN[1]	20	n	N/A	A	A	AB	"A" "AB"	Alignment pattern CH1	Measuring Alignment Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14112	ALI_PATRN[2]	20	n	N/A	A	A	AB	"A" "AB"	Alignment pattern CH2	Measuring Alignment Data	RO	RW	RW
14113	ALI_PATRN[3]	20	n	N/A	A	A	AB	"A" "AB"	Alignment pattern CH3	Measuring Alignment Data	RO	RW	RW
14114	ALI_PATRN[4]	20	n	N/A	A	A	AB	"A" "AB"	Alignment pattern CH4	Measuring Alignment Data	RO	RW	RW
14121	CSP_ALIPOS[1]	20	n	N/A	EDGE	EDGE	CENTER	"EDGE" "CENTER"	Position of first line CH1	Measuring Alignment Data	RO	RW	RW
14122	CSP_ALIPOS[2]	20	n	N/A	EDGE	EDGE	CENTER	"EDGE" "CENTER"	Position of first line CH2	Measuring Alignment Data	RO	RW	RW
14123	CSP_ALIPOS[3]	20	n	N/A	EDGE	EDGE	CENTER	"EDGE" "CENTER"	Position of first line CH3	Measuring Alignment Data	RO	RW	RW
14124	CSP_ALIPOS[4]	20	n	N/A	EDGE	EDGE	CENTER	"EDGE" "CENTER"	Position of first line CH4	Measuring Alignment Data	RO	RW	RW
14131	CSP_MODE_M[1]	20	n	N/A	T_ADJ	Y_ADJ	T_ADJ2	"Y_ADJ" "T_ADJ" "T_ADJ2"	Adjust mode (First line) CH1	Measuring Alignment Data	RO	RW	RW
14132	CSP_MODE_M[2]	20	n	N/A	T_ADJ	NO	T_ADJ2	"NO" "Y_ADJ" "T_ADJ" "T_ADJ2"	Adjust mode (First line) CH2	Measuring Alignment Data	RO	RW	RW
14133	CSP_MODE_M[3]	20	n	N/A	T_ADJ	NO	T_ADJ2	"NO" "Y_ADJ" "T_ADJ" "T_ADJ2"	Adjust mode (First line) CH3	Measuring Alignment Data	RO	RW	RW
14134	CSP_MODE_M[4]	20	n	N/A	T_ADJ	NO	T_ADJ2	"NO" "Y_ADJ" "T_ADJ" "T_ADJ2"	Adjust mode (First line) CH4	Measuring Alignment Data	RO	RW	RW
14141	CSP_MODE_N[1]	20	n	N/A	Y_ADJ	Y_ADJ	T_ADJ2	"Y_ADJ" "T_ADJ" "T_ADJ2"	Adjust mode (Subsequent) CH1	Measuring Alignment Data	RO	RW	RW
14142	CSP_MODE_N[2]	20	n	N/A	Y_ADJ	Y_ADJ	T_ADJ2	"Y_ADJ" "T_ADJ" "T_ADJ2"	Adjust mode (Subsequent) CH2	Measuring Alignment Data	RO	RW	RW
14143	CSP_MODE_N[3]	20	n	N/A	Y_ADJ	Y_ADJ	T_ADJ2	"Y_ADJ" "T_ADJ" "T_ADJ2"	Adjust mode (Subsequent) CH3	Measuring Alignment Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14144	CSP_MODE_N[4]	20	n	N/A	Y_ADJ	Y_ADJ	T_ADJ2	"Y_ADJ" "T_ADJ" "T_ADJ2"	Adjust mode (Subsequent) CH4	Measuring Alignment Data	RO	RW	RW
14151	CSP_THETA[1]	20	n	N/A	YES	NO	YES	"NO" "YES"	Theta divided alignment CH1	Measuring Alignment Data	RO	RW	RW
14152	CSP_THETA[2]	20	n	N/A	YES	NO	YES	"NO" "YES"	Theta divided alignment CH2	Measuring Alignment Data	RO	RW	RW
14153	CSP_THETA[3]	20	n	N/A	YES	NO	YES	"NO" "YES"	Theta divided alignment CH3	Measuring Alignment Data	RO	RW	RW
14154	CSP_THETA[4]	20	n	N/A	YES	NO	YES	"NO" "YES"	Theta divided alignment CH4	Measuring Alignment Data	RO	RW	RW
14161	CSP_ALIMODE[1]	20	n	N/A	1_BY_1	1_BY_1	BETWEEN	"1_BY_1" "BETWEEN"	Targets exist with street CH1	Measuring Alignment Data	RO	RW	RW
14162	CSP_ALIMODE[2]	20	n	N/A	1_BY_1	1_BY_1	BETWEEN	"1_BY_1" "BETWEEN"	Targets exist with street CH2	Measuring Alignment Data	RO	RW	RW
14163	CSP_ALIMODE[3]	20	n	N/A	1_BY_1	1_BY_1	BETWEEN	"1_BY_1" "BETWEEN"	Targets exist with street CH3	Measuring Alignment Data	RO	RW	RW
14164	CSP_ALIMODE[4]	20	n	N/A	1_BY_1	1_BY_1	BETWEEN	"1_BY_1" "BETWEEN"	Targets exist with street CH4	Measuring Alignment Data	RO	RW	RW
14170	DUAL_THETA_AVG	20	n	N/A	YES	NO	YES	"NO" "YES"	Average theta of Z1 and Z2	Measuring Alignment Data	RO	RW	RW
14171	CSP_QUE_YN	20	n	N/A	NO	NO	YES	"NO" "ALI" "YES"	Batch sequence	Measuring Alignment Data	RO	RW	RW
14172	ALI_DUAL_SCOPE	20	n	N/A	NO	NO	YES	"NO" "YES"	Use Z2 microscope	Measuring Alignment Data	RO	RW	RW
14173	CSP_MAC_THE	20	n	N/A	NO	NO	ABMacro	"NO" "Y_ADJ" "T_ADJ" "ABMacro"	Macro alignment	Measuring Alignment Data	RO	RW	RW
14174	CSP_MAC_E_S	20	n	N/A	NO	NO	YES	"NO" "YES"	Macro edge search	Measuring Alignment Data	RO	RW	RW
14175	CSP_Y_LIM	34	4	nm	0	0	999999000		Correction limit Y	Measuring Alignment Data	RO	RW	RW
14176	CSP_T_LIM	34	4	10^-6deg	0	0	999999000		Correction limit Theta	Measuring Alignment Data	RO	RW	RW
14308	CSP_ST_REP	20	n	N/A	NO	NO	YES	"NO" "YES"	Repeat index	Least Square Method Theta Adjust Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14309	CSP_ST_REV	34	4	nm	0	0	99999900		Adjust limit (Least square method)	Least Square Method Theta Adjust Data	RO	RW	RW
14310	CSP_ST_THE1[0]	34	4	nm	0	0	999999000		Strokes for theta adjust CH1 No.1	Least Square Method Theta Adjust Data	RO	RW	RW
14311	CSP_ST_THE1[1]	34	4	nm	0	0	999999000		Strokes for theta adjust CH1 No.2	Least Square Method Theta Adjust Data	RO	RW	RW
14312	CSP_ST_THE1[2]	34	4	nm	0	0	999999000		Strokes for theta adjust CH1 No.3	Least Square Method Theta Adjust Data	RO	RW	RW
14313	CSP_ST_THE1[3]	34	4	nm	0	0	999999000		Strokes for theta adjust CH1 No.4	Least Square Method Theta Adjust Data	RO	RW	RW
14314	CSP_ST_THE1[4]	34	4	nm	0	0	999999000		Strokes for theta adjust CH1 No.5	Least Square Method Theta Adjust Data	RO	RW	RW
14315	CSP_ST_THE1[5]	34	4	nm	0	0	999999000		Strokes for theta adjust CH1 No.6	Least Square Method Theta Adjust Data	RO	RW	RW
14316	CSP_ST_THE1[6]	34	4	nm	0	0	999999000		Strokes for theta adjust CH1 No.7	Least Square Method Theta Adjust Data	RO	RW	RW
14317	CSP_ST_THE1[7]	34	4	nm	0	0	999999000		Strokes for theta adjust CH1 No.8	Least Square Method Theta Adjust Data	RO	RW	RW
14318	CSP_ST_THE1[8]	34	4	nm	0	0	999999000		Strokes for theta adjust CH1 No.9	Least Square Method Theta Adjust Data	RO	RW	RW
14319	CSP_ST_THE1[9]	34	4	nm	0	0	999999000		Strokes for theta adjust CH1 No.10	Least Square Method Theta Adjust Data	RO	RW	RW
14320	CSP_ST_THE2[0]	34	4	nm	0	0	999999000		Strokes for theta adjust CH2 No.1	Least Square Method Theta Adjust Data	RO	RW	RW
14321	CSP_ST_THE2[1]	34	4	nm	0	0	999999000		Strokes for theta adjust CH2 No.2	Least Square Method Theta Adjust Data	RO	RW	RW
14322	CSP_ST_THE2[2]	34	4	nm	0	0	999999000		Strokes for theta adjust CH2 No.3	Least Square Method Theta Adjust Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14323	CSP_ST_THE2[3]	34	4	nm	0	0	999999000		Strokes for theta adjust CH2 No.4	Least Square Method Theta Adjust Data	RO	RW	RW
14324	CSP_ST_THE2[4]	34	4	nm	0	0	999999000		Strokes for theta adjust CH2 No.5	Least Square Method Theta Adjust Data	RO	RW	RW
14325	CSP_ST_THE2[5]	34	4	nm	0	0	999999000		Strokes for theta adjust CH2 No.6	Least Square Method Theta Adjust Data	RO	RW	RW
14326	CSP_ST_THE2[6]	34	4	nm	0	0	999999000		Strokes for theta adjust CH2 No.7	Least Square Method Theta Adjust Data	RO	RW	RW
14327	CSP_ST_THE2[7]	34	4	nm	0	0	999999000		Strokes for theta adjust CH2 No.8	Least Square Method Theta Adjust Data	RO	RW	RW
14328	CSP_ST_THE2[8]	34	4	nm	0	0	999999000		Strokes for theta adjust CH2 No.9	Least Square Method Theta Adjust Data	RO	RW	RW
14329	CSP_ST_THE2[9]	34	4	nm	0	0	999999000		Strokes for theta adjust CH2 No.10	Least Square Method Theta Adjust Data	RO	RW	RW
14330	CSP_ST_THE3[0]	34	4	nm	0	0	999999000		Strokes for theta adjust CH3 No.1	Least Square Method Theta Adjust Data	RO	RW	RW
14331	CSP_ST_THE3[1]	34	4	nm	0	0	999999000		Strokes for theta adjust CH3 No.2	Least Square Method Theta Adjust Data	RO	RW	RW
14332	CSP_ST_THE3[2]	34	4	nm	0	0	999999000		Strokes for theta adjust CH3 No.3	Least Square Method Theta Adjust Data	RO	RW	RW
14333	CSP_ST_THE3[3]	34	4	nm	0	0	999999000		Strokes for theta adjust CH3 No.4	Least Square Method Theta Adjust Data	RO	RW	RW
14334	CSP_ST_THE3[4]	34	4	nm	0	0	999999000		Strokes for theta adjust CH3 No.5	Least Square Method Theta Adjust Data	RO	RW	RW
14335	CSP_ST_THE3[5]	34	4	nm	0	0	999999000		Strokes for theta adjust CH3 No.6	Least Square Method Theta Adjust Data	RO	RW	RW
14336	CSP_ST_THE3[6]	34	4	nm	0	0	999999000		Strokes for theta adjust CH3 No.7	Least Square Method Theta Adjust Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14337	CSP_ST_THE3[7]	34	4	nm	0	0	999999000		Strokes for theta adjust CH3 No.8	Least Square Method Theta Adjust Data	RO	RW	RW
14338	CSP_ST_THE3[8]	34	4	nm	0	0	999999000		Strokes for theta adjust CH3 No.9	Least Square Method Theta Adjust Data	RO	RW	RW
14339	CSP_ST_THE3[9]	34	4	nm	0	0	999999000		Strokes for theta adjust CH3 No.10	Least Square Method Theta Adjust Data	RO	RW	RW
14340	CSP_ST_THE4[0]	34	4	nm	0	0	999999000		Strokes for theta adjust CH4 No.1	Least Square Method Theta Adjust Data	RO	RW	RW
14341	CSP_ST_THE4[1]	34	4	nm	0	0	999999000		Strokes for theta adjust CH4 No.2	Least Square Method Theta Adjust Data	RO	RW	RW
14342	CSP_ST_THE4[2]	34	4	nm	0	0	999999000		Strokes for theta adjust CH4 No.3	Least Square Method Theta Adjust Data	RO	RW	RW
14343	CSP_ST_THE4[3]	34	4	nm	0	0	999999000		Strokes for theta adjust CH4 No.4	Least Square Method Theta Adjust Data	RO	RW	RW
14344	CSP_ST_THE4[4]	34	4	nm	0	0	999999000		Strokes for theta adjust CH4 No.5	Least Square Method Theta Adjust Data	RO	RW	RW
14345	CSP_ST_THE4[5]	34	4	nm	0	0	999999000		Strokes for theta adjust CH4 No.6	Least Square Method Theta Adjust Data	RO	RW	RW
14346	CSP_ST_THE4[6]	34	4	nm	0	0	999999000		Strokes for theta adjust CH4 No.7	Least Square Method Theta Adjust Data	RO	RW	RW
14347	CSP_ST_THE4[7]	34	4	nm	0	0	999999000		Strokes for theta adjust CH4 No.8	Least Square Method Theta Adjust Data	RO	RW	RW
14348	CSP_ST_THE4[8]	34	4	nm	0	0	999999000		Strokes for theta adjust CH4 No.9	Least Square Method Theta Adjust Data	RO	RW	RW
14349	CSP_ST_THE4[9]	34	4	nm	0	0	999999000		Strokes for theta adjust CH4 No.10	Least Square Method Theta Adjust Data	RO	RW	RW
14401	CSP_GAPX	34	4	nm	0	0	999999900		Distance between workpieces X	Multiple Mounting Data	RO	RW	RW
14402	CSP_GAPY	34	4	nm	0	0	999999900		Distance between workpieces Y	Multiple Mounting Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14403	POS_W_USE	20	n	N/A	NO	NO	YES	"NO" "YES"	Use coordinate data	Multiple Mounting Data	RO	RW	RW
14404	CSP_LOOP	34	4	N/A	0	0	16		Number of workpiece	Multiple Mounting Data	RO	RW	RW
14412	POS_W_X[1]	34	4	nm	0	-999999000	999999000		X position No.1	Multiple Mounting Data	RO	RW	RW
14413	POS_W_X[2]	34	4	nm	0	-999999000	999999000		X position No.2	Multiple Mounting Data	RO	RW	RW
14414	POS_W_X[3]	34	4	nm	0	-999999000	999999000		X position No.3	Multiple Mounting Data	RO	RW	RW
14415	POS_W_X[4]	34	4	nm	0	-999999000	999999000		X position No.4	Multiple Mounting Data	RO	RW	RW
14416	POS_W_X[5]	34	4	nm	0	-999999000	999999000		X position No.5	Multiple Mounting Data	RO	RW	RW
14417	POS_W_X[6]	34	4	nm	0	-999999000	999999000		X position No.6	Multiple Mounting Data	RO	RW	RW
14418	POS_W_X[7]	34	4	nm	0	-999999000	999999000		X position No.7	Multiple Mounting Data	RO	RW	RW
14419	POS_W_X[8]	34	4	nm	0	-999999000	999999000		X position No.8	Multiple Mounting Data	RO	RW	RW
14420	POS_W_X[9]	34	4	nm	0	-999999000	999999000		X position No.9	Multiple Mounting Data	RO	RW	RW
14432	POS_W_Y[1]	34	4	nm	0	-999999000	999999000		Y position No.1	Multiple Mounting Data	RO	RW	RW
14433	POS_W_Y[2]	34	4	nm	0	-999999000	999999000		Y position No.2	Multiple Mounting Data	RO	RW	RW
14434	POS_W_Y[3]	34	4	nm	0	-999999000	999999000		Y position No.3	Multiple Mounting Data	RO	RW	RW
14435	POS_W_Y[4]	34	4	nm	0	-999999000	999999000		Y position No.4	Multiple Mounting Data	RO	RW	RW
14436	POS_W_Y[5]	34	4	nm	0	-999999000	999999000		Y position No.5	Multiple Mounting Data	RO	RW	RW
14437	POS_W_Y[6]	34	4	nm	0	-999999000	999999000		Y position No.6	Multiple Mounting Data	RO	RW	RW
14438	POS_W_Y[7]	34	4	nm	0	-999999000	999999000		Y position No.7	Multiple Mounting Data	RO	RW	RW
14439	POS_W_Y[8]	34	4	nm	0	-999999000	999999000		Y position No.8	Multiple Mounting Data	RO	RW	RW
14440	POS_W_Y[9]	34	4	nm	0	-999999000	999999000		Y position No.9	Multiple Mounting Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14452	OFFSETX[1]	34	4	nm	0	-99999900	99999900		X offset No.1	Multiple Mounting Data	RO	RW	RW
14453	OFFSETX[2]	34	4	nm	0	-99999900	99999900		X offset No.2	Multiple Mounting Data	RO	RW	RW
14454	OFFSETX[3]	34	4	nm	0	-99999900	99999900		X offset No.3	Multiple Mounting Data	RO	RW	RW
14455	OFFSETX[4]	34	4	nm	0	-99999900	99999900		X offset No.4	Multiple Mounting Data	RO	RW	RW
14456	OFFSETX[5]	34	4	nm	0	-99999900	99999900		X offset No.5	Multiple Mounting Data	RO	RW	RW
14457	OFFSETX[6]	34	4	nm	0	-99999900	99999900		X offset No.6	Multiple Mounting Data	RO	RW	RW
14458	OFFSETX[7]	34	4	nm	0	-99999900	99999900		X offset No.7	Multiple Mounting Data	RO	RW	RW
14459	OFFSETX[8]	34	4	nm	0	-99999900	99999900		X offset No.8	Multiple Mounting Data	RO	RW	RW
14460	OFFSETX[9]	34	4	nm	0	-99999900	99999900		X offset No.9	Multiple Mounting Data	RO	RW	RW
14472	OFFSETY[1]	34	4	nm	0	-99999900	99999900		Y offset No.1	Multiple Mounting Data	RO	RW	RW
14473	OFFSETY[2]	34	4	nm	0	-99999900	99999900		Y offset No.2	Multiple Mounting Data	RO	RW	RW
14474	OFFSETY[3]	34	4	nm	0	-99999900	99999900		Y offset No.3	Multiple Mounting Data	RO	RW	RW
14475	OFFSETY[4]	34	4	nm	0	-99999900	99999900		Y offset No.4	Multiple Mounting Data	RO	RW	RW
14476	OFFSETY[5]	34	4	nm	0	-99999900	99999900		Y offset No.5	Multiple Mounting Data	RO	RW	RW
14477	OFFSETY[6]	34	4	nm	0	-99999900	99999900		Y offset No.6	Multiple Mounting Data	RO	RW	RW
14478	OFFSETY[7]	34	4	nm	0	-99999900	99999900		Y offset No.7	Multiple Mounting Data	RO	RW	RW
14479	OFFSETY[8]	34	4	nm	0	-99999900	99999900		Y offset No.8	Multiple Mounting Data	RO	RW	RW
14480	OFFSETY[9]	34	4	nm	0	-99999900	99999900		Y offset No.9	Multiple Mounting Data	RO	RW	RW
14500	ORDER_USE	20	n	N/A	NO	NO	YES	"NO" "YES"	Use cutting line order data	Cutting Line Order Data	RO	RW	RW
14501	ORDER_CH[0]	34	4	N/A	0	0	9		Cutting order CH Seq1	Cutting Line Order Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14502	ORDER_CH[1]	34	4	N/A	0	0	9		Cutting order CH Seq2	Cutting Line Order Data	RO	RW	RW
14503	ORDER_CH[2]	34	4	N/A	0	0	9		Cutting order CH Seq3	Cutting Line Order Data	RO	RW	RW
14504	ORDER_CH[3]	34	4	N/A	0	0	9		Cutting order CH Seq4	Cutting Line Order Data	RO	RW	RW
14505	ORDER_CH[4]	34	4	N/A	0	0	9		Cutting order CH Seq5	Cutting Line Order Data	RO	RW	RW
14506	ORDER_CH[5]	34	4	N/A	0	0	9		Cutting order CH Seq6	Cutting Line Order Data	RO	RW	RW
14507	ORDER_CH[6]	34	4	N/A	0	0	9		Cutting order CH Seq7	Cutting Line Order Data	RO	RW	RW
14508	ORDER_CH[7]	34	4	N/A	0	0	9		Cutting order CH Seq8	Cutting Line Order Data	RO	RW	RW
14509	ORDER_CH[8]	34	4	N/A	0	0	9		Cutting order CH Seq9	Cutting Line Order Data	RO	RW	RW
14510	ORDER_CH[9]	34	4	N/A	0	0	9		Cutting order CH Seq10	Cutting Line Order Data	RO	RW	RW
14511	ORDER_CH[10]	34	4	N/A	0	0	9		Cutting order CH Seq11	Cutting Line Order Data	RO	RW	RW
14512	ORDER_CH[11]	34	4	N/A	0	0	9		Cutting order CH Seq12	Cutting Line Order Data	RO	RW	RW
14513	ORDER_CH[12]	34	4	N/A	0	0	9		Cutting order CH Seq13	Cutting Line Order Data	RO	RW	RW
14514	ORDER_CH[13]	34	4	N/A	0	0	9		Cutting order CH Seq14	Cutting Line Order Data	RO	RW	RW
14515	ORDER_CH[14]	34	4	N/A	0	0	9		Cutting order CH Seq15	Cutting Line Order Data	RO	RW	RW
14516	ORDER_CH[15]	34	4	N/A	0	0	9		Cutting order CH Seq16	Cutting Line Order Data	RO	RW	RW
14517	ORDER_CH[16]	34	4	N/A	0	0	9		Cutting order CH Seq17	Cutting Line Order Data	RO	RW	RW
14518	ORDER_CH[17]	34	4	N/A	0	0	9		Cutting order CH Seq18	Cutting Line Order Data	RO	RW	RW
14519	ORDER_CH[18]	34	4	N/A	0	0	9		Cutting order CH Seq19	Cutting Line Order Data	RO	RW	RW
14520	ORDER_CH[19]	34	4	N/A	0	0	9		Cutting order CH Seq20	Cutting Line Order Data	RO	RW	RW
14521	ORDER_CH[20]	34	4	N/A	0	0	9		Cutting order CH Seq21	Cutting Line Order Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14522	ORDER_CH[21]	34	4	N/A	0	0	9		Cutting order CH Seq22	Cutting Line Order Data	RO	RW	RW
14523	ORDER_CH[22]	34	4	N/A	0	0	9		Cutting order CH Seq23	Cutting Line Order Data	RO	RW	RW
14524	ORDER_CH[23]	34	4	N/A	0	0	9		Cutting order CH Seq24	Cutting Line Order Data	RO	RW	RW
14525	ORDER_CH[24]	34	4	N/A	0	0	9		Cutting order CH Seq25	Cutting Line Order Data	RO	RW	RW
14526	ORDER_CH[25]	34	4	N/A	0	0	9		Cutting order CH Seq26	Cutting Line Order Data	RO	RW	RW
14527	ORDER_CH[26]	34	4	N/A	0	0	9		Cutting order CH Seq27	Cutting Line Order Data	RO	RW	RW
14528	ORDER_CH[27]	34	4	N/A	0	0	9		Cutting order CH Seq28	Cutting Line Order Data	RO	RW	RW
14529	ORDER_CH[28]	34	4	N/A	0	0	9		Cutting order CH Seq29	Cutting Line Order Data	RO	RW	RW
14530	ORDER_CH[29]	34	4	N/A	0	0	9		Cutting order CH Seq30	Cutting Line Order Data	RO	RW	RW
14551	ORDER_ST[0]	34	4	N/A	0	0	999		Cutting order Start line Seq1	Cutting Line Order Data	RO	RW	RW
14552	ORDER_ST[1]	34	4	N/A	0	0	999		Cutting order Start line Seq2	Cutting Line Order Data	RO	RW	RW
14553	ORDER_ST[2]	34	4	N/A	0	0	999		Cutting order Start line Seq3	Cutting Line Order Data	RO	RW	RW
14554	ORDER_ST[3]	34	4	N/A	0	0	999		Cutting order Start line Seq4	Cutting Line Order Data	RO	RW	RW
14555	ORDER_ST[4]	34	4	N/A	0	0	999		Cutting order Start line Seq5	Cutting Line Order Data	RO	RW	RW
14556	ORDER_ST[5]	34	4	N/A	0	0	999		Cutting order Start line Seq6	Cutting Line Order Data	RO	RW	RW
14557	ORDER_ST[6]	34	4	N/A	0	0	999		Cutting order Start line Seq7	Cutting Line Order Data	RO	RW	RW
14558	ORDER_ST[7]	34	4	N/A	0	0	999		Cutting order Start line Seq8	Cutting Line Order Data	RO	RW	RW
14559	ORDER_ST[8]	34	4	N/A	0	0	999		Cutting order Start line Seq9	Cutting Line Order Data	RO	RW	RW
14560	ORDER_ST[9]	34	4	N/A	0	0	999		Cutting order Start line Seq10	Cutting Line Order Data	RO	RW	RW
14561	ORDER_ST[10]	34	4	N/A	0	0	999		Cutting order Start line Seq11	Cutting Line Order Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14562	ORDER_ST[11]	34	4	N/A	0	0	999		Cutting order Start line Seq12	Cutting Line Order Data	RO	RW	RW
14563	ORDER_ST[12]	34	4	N/A	0	0	999		Cutting order Start line Seq13	Cutting Line Order Data	RO	RW	RW
14564	ORDER_ST[13]	34	4	N/A	0	0	999		Cutting order Start line Seq14	Cutting Line Order Data	RO	RW	RW
14565	ORDER_ST[14]	34	4	N/A	0	0	999		Cutting order Start line Seq15	Cutting Line Order Data	RO	RW	RW
14566	ORDER_ST[15]	34	4	N/A	0	0	999		Cutting order Start line Seq16	Cutting Line Order Data	RO	RW	RW
14567	ORDER_ST[16]	34	4	N/A	0	0	999		Cutting order Start line Seq17	Cutting Line Order Data	RO	RW	RW
14568	ORDER_ST[17]	34	4	N/A	0	0	999		Cutting order Start line Seq18	Cutting Line Order Data	RO	RW	RW
14569	ORDER_ST[18]	34	4	N/A	0	0	999		Cutting order Start line Seq19	Cutting Line Order Data	RO	RW	RW
14570	ORDER_ST[19]	34	4	N/A	0	0	999		Cutting order Start line Seq20	Cutting Line Order Data	RO	RW	RW
14571	ORDER_ST[20]	34	4	N/A	0	0	999		Cutting order Start line Seq21	Cutting Line Order Data	RO	RW	RW
14572	ORDER_ST[21]	34	4	N/A	0	0	999		Cutting order Start line Seq22	Cutting Line Order Data	RO	RW	RW
14573	ORDER_ST[22]	34	4	N/A	0	0	999		Cutting order Start line Seq23	Cutting Line Order Data	RO	RW	RW
14574	ORDER_ST[23]	34	4	N/A	0	0	999		Cutting order Start line Seq24	Cutting Line Order Data	RO	RW	RW
14575	ORDER_ST[24]	34	4	N/A	0	0	999		Cutting order Start line Seq25	Cutting Line Order Data	RO	RW	RW
14576	ORDER_ST[25]	34	4	N/A	0	0	999		Cutting order Start line Seq26	Cutting Line Order Data	RO	RW	RW
14577	ORDER_ST[26]	34	4	N/A	0	0	999		Cutting order Start line Seq27	Cutting Line Order Data	RO	RW	RW
14578	ORDER_ST[27]	34	4	N/A	0	0	999		Cutting order Start line Seq28	Cutting Line Order Data	RO	RW	RW
14579	ORDER_ST[28]	34	4	N/A	0	0	999		Cutting order Start line Seq29	Cutting Line Order Data	RO	RW	RW
14580	ORDER_ST[29]	34	4	N/A	0	0	999		Cutting order Start line Seq30	Cutting Line Order Data	RO	RW	RW
14601	ORDER_ED[0]	34	4	N/A	0	0	999		Cutting order End line Seq1	Cutting Line Order Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14602	ORDER_ED[1]	34	4	N/A	0	0	999		Cutting order End line Seq2	Cutting Line Order Data	RO	RW	RW
14603	ORDER_ED[2]	34	4	N/A	0	0	999		Cutting order End line Seq3	Cutting Line Order Data	RO	RW	RW
14604	ORDER_ED[3]	34	4	N/A	0	0	999		Cutting order End line Seq4	Cutting Line Order Data	RO	RW	RW
14605	ORDER_ED[4]	34	4	N/A	0	0	999		Cutting order End line Seq5	Cutting Line Order Data	RO	RW	RW
14606	ORDER_ED[5]	34	4	N/A	0	0	999		Cutting order End line Seq6	Cutting Line Order Data	RO	RW	RW
14607	ORDER_ED[6]	34	4	N/A	0	0	999		Cutting order End line Seq7	Cutting Line Order Data	RO	RW	RW
14608	ORDER_ED[7]	34	4	N/A	0	0	999		Cutting order End line Seq8	Cutting Line Order Data	RO	RW	RW
14609	ORDER_ED[8]	34	4	N/A	0	0	999		Cutting order End line Seq9	Cutting Line Order Data	RO	RW	RW
14610	ORDER_ED[9]	34	4	N/A	0	0	999		Cutting order End line Seq10	Cutting Line Order Data	RO	RW	RW
14611	ORDER_ED[10]	34	4	N/A	0	0	999		Cutting order End line Seq11	Cutting Line Order Data	RO	RW	RW
14612	ORDER_ED[11]	34	4	N/A	0	0	999		Cutting order End line Seq12	Cutting Line Order Data	RO	RW	RW
14613	ORDER_ED[12]	34	4	N/A	0	0	999		Cutting order End line Seq13	Cutting Line Order Data	RO	RW	RW
14614	ORDER_ED[13]	34	4	N/A	0	0	999		Cutting order End line Seq14	Cutting Line Order Data	RO	RW	RW
14615	ORDER_ED[14]	34	4	N/A	0	0	999		Cutting order End line Seq15	Cutting Line Order Data	RO	RW	RW
14616	ORDER_ED[15]	34	4	N/A	0	0	999		Cutting order End line Seq16	Cutting Line Order Data	RO	RW	RW
14617	ORDER_ED[16]	34	4	N/A	0	0	999		Cutting order End line Seq17	Cutting Line Order Data	RO	RW	RW
14618	ORDER_ED[17]	34	4	N/A	0	0	999		Cutting order End line Seq18	Cutting Line Order Data	RO	RW	RW
14619	ORDER_ED[18]	34	4	N/A	0	0	999		Cutting order End line Seq19	Cutting Line Order Data	RO	RW	RW
14620	ORDER_ED[19]	34	4	N/A	0	0	999		Cutting order End line Seq20	Cutting Line Order Data	RO	RW	RW
14621	ORDER_ED[20]	34	4	N/A	0	0	999		Cutting order End line Seq21	Cutting Line Order Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14622	ORDER_ED[21]	34	4	N/A	0	0	999		Cutting order End line Seq22	Cutting Line Order Data	RO	RW	RW
14623	ORDER_ED[22]	34	4	N/A	0	0	999		Cutting order End line Seq23	Cutting Line Order Data	RO	RW	RW
14624	ORDER_ED[23]	34	4	N/A	0	0	999		Cutting order End line Seq24	Cutting Line Order Data	RO	RW	RW
14625	ORDER_ED[24]	34	4	N/A	0	0	999		Cutting order End line Seq25	Cutting Line Order Data	RO	RW	RW
14626	ORDER_ED[25]	34	4	N/A	0	0	999		Cutting order End line Seq26	Cutting Line Order Data	RO	RW	RW
14627	ORDER_ED[26]	34	4	N/A	0	0	999		Cutting order End line Seq27	Cutting Line Order Data	RO	RW	RW
14628	ORDER_ED[27]	34	4	N/A	0	0	999		Cutting order End line Seq28	Cutting Line Order Data	RO	RW	RW
14629	ORDER_ED[28]	34	4	N/A	0	0	999		Cutting order End line Seq29	Cutting Line Order Data	RO	RW	RW
14630	ORDER_ED[29]	34	4	N/A	0	0	999		Cutting order End line Seq30	Cutting Line Order Data	RO	RW	RW
14651	ORDER_WITH[0]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq1	Cutting Line Order Data	RO	RW	RW
14652	ORDER_WITH[1]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq2	Cutting Line Order Data	RO	RW	RW
14653	ORDER_WITH[2]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq3	Cutting Line Order Data	RO	RW	RW
14654	ORDER_WITH[3]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq4	Cutting Line Order Data	RO	RW	RW
14655	ORDER_WITH[4]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq5	Cutting Line Order Data	RO	RW	RW
14656	ORDER_WITH[5]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq6	Cutting Line Order Data	RO	RW	RW
14657	ORDER_WITH[6]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq7	Cutting Line Order Data	RO	RW	RW
14658	ORDER_WITH[7]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq8	Cutting Line Order Data	RO	RW	RW
14659	ORDER_WITH[8]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq9	Cutting Line Order Data	RO	RW	RW
14660	ORDER_WITH[9]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq10	Cutting Line Order Data	RO	RW	RW
14661	ORDER_WITH[10]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq11	Cutting Line Order Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14662	ORDER_WITH[11]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq12	Cutting Line Order Data	RO	RW	RW
14663	ORDER_WITH[12]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq13	Cutting Line Order Data	RO	RW	RW
14664	ORDER_WITH[13]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq14	Cutting Line Order Data	RO	RW	RW
14665	ORDER_WITH[14]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq15	Cutting Line Order Data	RO	RW	RW
14666	ORDER_WITH[15]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq16	Cutting Line Order Data	RO	RW	RW
14667	ORDER_WITH[16]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq17	Cutting Line Order Data	RO	RW	RW
14668	ORDER_WITH[17]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq18	Cutting Line Order Data	RO	RW	RW
14669	ORDER_WITH[18]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq19	Cutting Line Order Data	RO	RW	RW
14670	ORDER_WITH[19]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq20	Cutting Line Order Data	RO	RW	RW
14671	ORDER_WITH[20]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq21	Cutting Line Order Data	RO	RW	RW
14672	ORDER_WITH[21]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq22	Cutting Line Order Data	RO	RW	RW
14673	ORDER_WITH[22]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq23	Cutting Line Order Data	RO	RW	RW
14674	ORDER_WITH[23]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq24	Cutting Line Order Data	RO	RW	RW
14675	ORDER_WITH[24]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq25	Cutting Line Order Data	RO	RW	RW
14676	ORDER_WITH[25]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq26	Cutting Line Order Data	RO	RW	RW
14677	ORDER_WITH[26]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq27	Cutting Line Order Data	RO	RW	RW
14678	ORDER_WITH[27]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq28	Cutting Line Order Data	RO	RW	RW
14679	ORDER_WITH[28]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq29	Cutting Line Order Data	RO	RW	RW
14680	ORDER_WITH[29]	20	n	N/A	NO	NO	YES	"NO" "YES"	Cutting order Together with next sequence Seq30	Cutting Line Order Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14701	ORDER_JIKU[0]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq1	Cutting Line Order Data	RO	RW	RW
14702	ORDER_JIKU[1]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq2	Cutting Line Order Data	RO	RW	RW
14703	ORDER_JIKU[2]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq3	Cutting Line Order Data	RO	RW	RW
14704	ORDER_JIKU[3]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq4	Cutting Line Order Data	RO	RW	RW
14705	ORDER_JIKU[4]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq5	Cutting Line Order Data	RO	RW	RW
14706	ORDER_JIKU[5]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq6	Cutting Line Order Data	RO	RW	RW
14707	ORDER_JIKU[6]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq7	Cutting Line Order Data	RO	RW	RW
14708	ORDER_JIKU[7]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq8	Cutting Line Order Data	RO	RW	RW
14709	ORDER_JIKU[8]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq9	Cutting Line Order Data	RO	RW	RW
14710	ORDER_JIKU[9]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq10	Cutting Line Order Data	RO	RW	RW
14711	ORDER_JIKU[10]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq11	Cutting Line Order Data	RO	RW	RW
14712	ORDER_JIKU[11]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq12	Cutting Line Order Data	RO	RW	RW
14713	ORDER_JIKU[12]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq13	Cutting Line Order Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14714	ORDER_JIKU[13]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq14	Cutting Line Order Data	RO	RW	RW
14715	ORDER_JIKU[14]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq15	Cutting Line Order Data	RO	RW	RW
14716	ORDER_JIKU[15]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq16	Cutting Line Order Data	RO	RW	RW
14717	ORDER_JIKU[16]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq17	Cutting Line Order Data	RO	RW	RW
14718	ORDER_JIKU[17]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq18	Cutting Line Order Data	RO	RW	RW
14719	ORDER_JIKU[18]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq19	Cutting Line Order Data	RO	RW	RW
14720	ORDER_JIKU[19]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq20	Cutting Line Order Data	RO	RW	RW
14721	ORDER_JIKU[20]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq21	Cutting Line Order Data	RO	RW	RW
14722	ORDER_JIKU[21]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq22	Cutting Line Order Data	RO	RW	RW
14723	ORDER_JIKU[22]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq23	Cutting Line Order Data	RO	RW	RW
14724	ORDER_JIKU[23]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq24	Cutting Line Order Data	RO	RW	RW
14725	ORDER_JIKU[24]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq25	Cutting Line Order Data	RO	RW	RW
14726	ORDER_JIKU[25]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq26	Cutting Line Order Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
14727	ORDER_JIKU[26]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq27	Cutting Line Order Data	RO	RW	RW
14728	ORDER_JIKU[27]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq28	Cutting Line Order Data	RO	RW	RW
14729	ORDER_JIKU[28]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq29	Cutting Line Order Data	RO	RW	RW
14730	ORDER_JIKU[29]	34	4	N/A	0	0	2	0=Dicer control 1=Z1 2=Z2	Cutting order Axis Seq30	Cutting Line Order Data	RO	RW	RW
15501	BAR_SIZE_X[0]	34	4	nm	0	0	999999000		Setup area Size X Area1	Setup Area Data	RO	RW	RW
15502	BAR_SIZE_X[1]	34	4	nm	0	0	999999000		Setup area Size X Area2	Setup Area Data	RO	RW	RW
15503	BAR_SIZE_X[2]	34	4	nm	0	0	999999000		Setup area Size X Area3	Setup Area Data	RO	RW	RW
15504	BAR_SIZE_X[3]	34	4	nm	0	0	999999000		Setup area Size X Area4	Setup Area Data	RO	RW	RW
15505	BAR_SIZE_X[4]	34	4	nm	0	0	999999000		Setup area Size X Area5	Setup Area Data	RO	RW	RW
15506	BAR_SIZE_X[5]	34	4	nm	0	0	999999000		Setup area Size X Area6	Setup Area Data	RO	RW	RW
15511	BAR_SIZE_Y[0]	34	4	nm	0	0	999999000		Setup area Size Y Area1	Setup Area Data	RO	RW	RW
15512	BAR_SIZE_Y[1]	34	4	nm	0	0	999999000		Setup area Size Y Area2	Setup Area Data	RO	RW	RW
15513	BAR_SIZE_Y[2]	34	4	nm	0	0	999999000		Setup area Size Y Area3	Setup Area Data	RO	RW	RW
15514	BAR_SIZE_Y[3]	34	4	nm	0	0	999999000		Setup area Size Y Area4	Setup Area Data	RO	RW	RW
15515	BAR_SIZE_Y[4]	34	4	nm	0	0	999999000		Setup area Size Y Area5	Setup Area Data	RO	RW	RW
15516	BAR_SIZE_Y[5]	34	4	nm	0	0	999999000		Setup area Size Y Area6	Setup Area Data	RO	RW	RW
15521	BAR_START_X[0]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. X Area1	Setup Area Data	RO	RW	RW
15522	BAR_START_X[1]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. X Area2	Setup Area Data	RO	RW	RW
15523	BAR_START_X[2]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. X Area3	Setup Area Data	RO	RW	RW
15524	BAR_START_X[3]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. X Area4	Setup Area Data	RO	RW	RW
15525	BAR_START_X[4]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. X Area5	Setup Area Data	RO	RW	RW
15526	BAR_START_X[5]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. X Area6	Setup Area Data	RO	RW	RW
15531	BAR_START_Y[0]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. Y Area1	Setup Area Data	RO	RW	RW
15532	BAR_START_Y[1]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. Y Area2	Setup Area Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
15533	BAR_START_Y[2]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. Y Area3	Setup Area Data	RO	RW	RW
15534	BAR_START_Y[3]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. Y Area4	Setup Area Data	RO	RW	RW
15535	BAR_START_Y[4]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. Y Area5	Setup Area Data	RO	RW	RW
15536	BAR_START_Y[5]	34	4	nm	0	-999999000	999999000		Setup area Setup start pos. Y Area6	Setup Area Data	RO	RW	RW
15541	BAR_END_X[0]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. X Area1	Setup Area Data	RO	RW	RW
15542	BAR_END_X[1]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. X Area2	Setup Area Data	RO	RW	RW
15543	BAR_END_X[2]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. X Area3	Setup Area Data	RO	RW	RW
15544	BAR_END_X[3]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. X Area4	Setup Area Data	RO	RW	RW
15545	BAR_END_X[4]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. X Area5	Setup Area Data	RO	RW	RW
15546	BAR_END_X[5]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. X Area6	Setup Area Data	RO	RW	RW
15551	BAR_END_Y[0]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. Y Area1	Setup Area Data	RO	RW	RW
15552	BAR_END_Y[1]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. Y Area2	Setup Area Data	RO	RW	RW
15553	BAR_END_Y[2]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. Y Area3	Setup Area Data	RO	RW	RW
15554	BAR_END_Y[3]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. Y Area4	Setup Area Data	RO	RW	RW
15555	BAR_END_Y[4]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. Y Area5	Setup Area Data	RO	RW	RW
15556	BAR_END_Y[5]	34	4	nm	0	-999999000	999999000		Setup area Setup end pos. Y Area6	Setup Area Data	RO	RW	RW
15561	BAR_T[0]	34	4	10^-6deg	0	-999999000	999999000		Setup area Theta pos. Area1	Setup Area Data	RO	RW	RW
15562	BAR_T[1]	34	4	10^-6deg	0	-999999000	999999000		Setup area Theta pos. Area2	Setup Area Data	RO	RW	RW
15563	BAR_T[2]	34	4	10^-6deg	0	-999999000	999999000		Setup area Theta pos. Area3	Setup Area Data	RO	RW	RW
15564	BAR_T[3]	34	4	10^-6deg	0	-999999000	999999000		Setup area Theta pos. Area4	Setup Area Data	RO	RW	RW
15565	BAR_T[4]	34	4	10^-6deg	0	-999999000	999999000		Setup area Theta pos. Area5	Setup Area Data	RO	RW	RW
15566	BAR_T[5]	34	4	10^-6deg	0	-999999000	999999000		Setup area Theta pos. Area6	Setup Area Data	RO	RW	RW
15571	BAR_ADJ[0]	34	4	nm	0	-999999000	999999000		Setup area Height offset Area1	Setup Area Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
15572	BAR_ADJ[1]	34	4	nm	0	-999999000	999999000		Setup area Height offset Area2	Setup Area Data	RO	RW	RW
15573	BAR_ADJ[2]	34	4	nm	0	-999999000	999999000		Setup area Height offset Area3	Setup Area Data	RO	RW	RW
15574	BAR_ADJ[3]	34	4	nm	0	-999999000	999999000		Setup area Height offset Area4	Setup Area Data	RO	RW	RW
15575	BAR_ADJ[4]	34	4	nm	0	-999999000	999999000		Setup area Height offset Area5	Setup Area Data	RO	RW	RW
15576	BAR_ADJ[5]	34	4	nm	0	-999999000	999999000		Setup area Height offset Area6	Setup Area Data	RO	RW	RW
15581	BAR_ROOM_X[0]	34	4	nm	0	0	99999000		Setup area Room width X Area1	Setup Area Data	RO	RW	RW
15582	BAR_ROOM_X[1]	34	4	nm	0	0	99999000		Setup area Room width X Area2	Setup Area Data	RO	RW	RW
15583	BAR_ROOM_X[2]	34	4	nm	0	0	99999000		Setup area Room width X Area3	Setup Area Data	RO	RW	RW
15584	BAR_ROOM_X[3]	34	4	nm	0	0	99999000		Setup area Room width X Area4	Setup Area Data	RO	RW	RW
15585	BAR_ROOM_X[4]	34	4	nm	0	0	99999000		Setup area Room width X Area5	Setup Area Data	RO	RW	RW
15586	BAR_ROOM_X[5]	34	4	nm	0	0	99999000		Setup area Room width X Area6	Setup Area Data	RO	RW	RW
15591	BAR_ROOM_Y[0]	34	4	nm	0	0	99999000		Setup area Room width Y Area1	Setup Area Data	RO	RW	RW
15592	BAR_ROOM_Y[1]	34	4	nm	0	0	99999000		Setup area Room width Y Area2	Setup Area Data	RO	RW	RW
15593	BAR_ROOM_Y[2]	34	4	nm	0	0	99999000		Setup area Room width Y Area3	Setup Area Data	RO	RW	RW
15594	BAR_ROOM_Y[3]	34	4	nm	0	0	99999000		Setup area Room width Y Area4	Setup Area Data	RO	RW	RW
15595	BAR_ROOM_Y[4]	34	4	nm	0	0	99999000		Setup area Room width Y Area5	Setup Area Data	RO	RW	RW
15596	BAR_ROOM_Y[5]	34	4	nm	0	0	99999000		Setup area Room width Y Area6	Setup Area Data	RO	RW	RW
15601	BAR_PITCHX[0]	34	4	nm	0	0	99999000		Setup area Motion pitch X Area1	Setup Area Data	RO	RW	RW
15602	BAR_PITCHX[1]	34	4	nm	0	0	99999000		Setup area Motion pitch X Area2	Setup Area Data	RO	RW	RW
15603	BAR_PITCHX[2]	34	4	nm	0	0	99999000		Setup area Motion pitch X Area3	Setup Area Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
15604	BAR_PITCHX[3]	34	4	nm	0	0	99999000		Setup area Motion pitch X Area4	Setup Area Data	RO	RW	RW
15605	BAR_PITCHX[4]	34	4	nm	0	0	99999000		Setup area Motion pitch X Area5	Setup Area Data	RO	RW	RW
15606	BAR_PITCHX[5]	34	4	nm	0	0	99999000		Setup area Motion pitch X Area6	Setup Area Data	RO	RW	RW
15611	BAR_PITCHY[0]	34	4	nm	0	0	99999000		Setup area Motion pitch Y Area1	Setup Area Data	RO	RW	RW
15612	BAR_PITCHY[1]	34	4	nm	0	0	99999000		Setup area Motion pitch Y Area2	Setup Area Data	RO	RW	RW
15613	BAR_PITCHY[2]	34	4	nm	0	0	99999000		Setup area Motion pitch Y Area3	Setup Area Data	RO	RW	RW
15614	BAR_PITCHY[3]	34	4	nm	0	0	99999000		Setup area Motion pitch Y Area4	Setup Area Data	RO	RW	RW
15615	BAR_PITCHY[4]	34	4	nm	0	0	99999000		Setup area Motion pitch Y Area5	Setup Area Data	RO	RW	RW
15616	BAR_PITCHY[5]	34	4	nm	0	0	99999000		Setup area Motion pitch Y Area6	Setup Area Data	RO	RW	RW
16001	AVAL_PTHRES_SET[0]	54	4	kPa	N/A	N/A	N/A		Main Air Pressure Target Value	Sensor Threshold Data	RO	RO	RO
16002	AVAL_PTHRES_SET[1]	54	4	kPa	N/A	N/A	N/A		Clean Air Pressure Target Value	Sensor Threshold Data	RO	RO	RO
16003	AVAL_PTHRES_SET[2]	54	4	kPa	N/A	N/A	N/A		Water Pressure Target Value	Sensor Threshold Data	RO	RO	RO
16004	AVAL_PTHRES_SET[3]	54	4	hPa	N/A	N/A	N/A		C/T Work Vacuum Target Value	Sensor Threshold Data	RO	RO	RO
16005	AVAL_PTHRES_SET[4]	54	4	hPa	N/A	N/A	N/A		S/T Work Vacuum Target Value	Sensor Threshold Data	RO	RW	RW
16006	AVAL_PTHRES_SET[5]	54	4	100kPa	N/A	N/A	N/A		High Pressure Pump Target Value	Sensor Threshold Data	RO	RO	RO
16007	AVAL_PTHRES_SET[6]	54	4	hPa	N/A	N/A	N/A		C/T Table Vacuum Target Value	Sensor Threshold Data	RO	RW	RW
16008	AVAL_PTHRES_SET[7]	54	4	hPa	N/A	N/A	N/A		Upper Arm Vacuum Target Value	Sensor Threshold Data	RO	RW	RW
16009	AVAL_PTHRES_SET[8]	54	4	hPa	N/A	N/A	N/A		Lower Arm Vacuum Target Value	Sensor Threshold Data	RO	RW	RW
16010	AVAL_PTHRES_SET[9]	54	4	%	N/A	N/A	N/A		BBD Level Z1 Target Value	Sensor Threshold Data	RO	RO	RO
16011	AVAL_PTHRES_SET[10]	54	4	%	N/A	N/A	N/A		BBD Level Z2 Target Value	Sensor Threshold Data	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
16012	AVAL_PTHRES_SET[11]	54	4	mA	N/A	N/A	N/A		Spindle Current Z1 Target Value	Sensor Threshold Data	RO	RO	RO
16013	AVAL_PTHRES_SET[12]	54	4	/min	N/A	N/A	N/A		Spindle Rev. Z1 Target Value	Sensor Threshold Data	RO	RO	RO
16014	AVAL_PTHRES_SET[13]	54	4	mA	N/A	N/A	N/A		Spindle Current Z2 Target Value	Sensor Threshold Data	RO	RO	RO
16015	AVAL_PTHRES_SET[14]	54	4	/min	N/A	N/A	N/A		Spindle Rev. Z2 Target Value	Sensor Threshold Data	RO	RO	RO
16016	AVAL_PTHRES_SET[15]	54	4	mV	N/A	N/A	N/A		NCS Level Z1 Target Value	Sensor Threshold Data	RO	RO	RO
16017	AVAL_PTHRES_SET[16]	54	4	mV	N/A	N/A	N/A		NCS Level Z2 Target Value	Sensor Threshold Data	RO	RO	RO
16018	AVAL_PTHRES_SET[17]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle Flow Rate Z1 Target Value	Sensor Threshold Data	RO	RO	RO
16019	AVAL_PTHRES_SET[18]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle (Rear) Flow Rate Z1 Target Value	Sensor Threshold Data	RO	RO	RO
16020	AVAL_PTHRES_SET[19]	54	4	mL/min	N/A	N/A	N/A		Shower Nozzle Flow Rate Z1 Target Value	Sensor Threshold Data	RO	RO	RO
16021	AVAL_PTHRES_SET[20]	54	4	mL/min	N/A	N/A	N/A		Spray Nozzle Flow Rate Z1 Target Value	Sensor Threshold Data	RO	RO	RO
16022	AVAL_PTHRES_SET[21]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle Flow Rate Z2 Target Value	Sensor Threshold Data	RO	RO	RO
16023	AVAL_PTHRES_SET[22]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle (Rear) Flow Rate Z2 Target Value	Sensor Threshold Data	RO	RO	RO
16024	AVAL_PTHRES_SET[23]	54	4	mL/min	N/A	N/A	N/A		Shower Nozzle Flow Rate Z2 Target Value	Sensor Threshold Data	RO	RO	RO
16025	AVAL_PTHRES_SET[24]	54	4	mL/min	N/A	N/A	N/A		Spray Nozzle Flow Rate Z2 Target Value	Sensor Threshold Data	RO	RO	RO
16026	AVAL_PTHRES_SET[25]	54	4	0.1degC	N/A	N/A	N/A		Holder Upper Temp Target Value	Sensor Threshold Data	RO	RO	RO
16027	AVAL_PTHRES_SET[26]	54	4	0.1degC	N/A	N/A	N/A		Holder Lower Temp Target Value	Sensor Threshold Data	RO	RO	RO
16028	AVAL_PTHRES_SET[27]	54	4	0.1degC	N/A	N/A	N/A		NCS Z1 Temp Target Value	Sensor Threshold Data	RO	RO	RO
16029	AVAL_PTHRES_SET[28]	54	4	0.1degC	N/A	N/A	N/A		NCS Z2 Temp Target Value	Sensor Threshold Data	RO	RO	RO
16030	AVAL_PTHRES_SET[29]	54	4	0.1degC	N/A	N/A	N/A		Column Temp Target Value	Sensor Threshold Data	RO	RO	RO
16031	AVAL_PTHRES_SET[30]	54	4	0.1degC	N/A	N/A	N/A		Table Base Temp Target Value	Sensor Threshold Data	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
16032	AVAL_PTHRES_SET[31]	54	4	0.1degC	N/A	N/A	N/A		Theta Base Temp Target Value	Sensor Threshold Data	RO	RO	RO
16033	AVAL_PTHRES_SET[32]	54	4	0.1degC	N/A	N/A	N/A		Cutting Water Temp Target Value	Sensor Threshold Data	RO	RO	RO
16034	AVAL_PTHRES_SET[33]	54	4	kPa	N/A	N/A	N/A		Atomizing Nozzle Clean air Press.(S/T) Target Value	Sensor Threshold Data	RO	RO	RO
16035	AVAL_PTHRES_SET[34]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 1 Target Value	Sensor Threshold Data	RO	RO	RO
16036	AVAL_PTHRES_SET[35]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 2 Target Value	Sensor Threshold Data	RO	RO	RO
16037	AVAL_PTHRES_SET[36]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 3 Target Value	Sensor Threshold Data	RO	RO	RO
16038	AVAL_PTHRES_SET[37]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 4 Target Value	Sensor Threshold Data	RO	RO	RO
16039	AVAL_PTHRES_SET[38]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 5 Target Value	Sensor Threshold Data	RO	RO	RO
16040	AVAL_PTHRES_SET[39]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 6 Target Value	Sensor Threshold Data	RO	RO	RO
16041	AVAL_PTHRES_SET[40]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 7 Target Value	Sensor Threshold Data	RO	RO	RO
16042	AVAL_PTHRES_SET[41]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 8 Target Value	Sensor Threshold Data	RO	RO	RO
16043	AVAL_PTHRES_SET[42]	54	4	hPa	N/A	N/A	N/A		Jig Vacuum pressure Target Value	Sensor Threshold Data	RO	RO	RO
16044	AVAL_PTHRES_SET[43]	54	4	hPa	N/A	N/A	N/A		Vacuum pump pressure Target Value	Sensor Threshold Data	RO	RO	RO
16045	AVAL_PTHRES_SET[44]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 9 Target Value	Sensor Threshold Data	RO	RO	RO
16046	AVAL_PTHRES_SET[45]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 10 Target Value	Sensor Threshold Data	RO	RO	RO
16047	AVAL_PTHRES_SET[46]	54	4	mL	N/A	N/A	N/A		CO2inj. TotalFlow Target Value	Sensor Threshold Data	RO	RO	RO
16048	AVAL_PTHRES_SET[47]	54	4	kOhm cm	N/A	N/A	N/A		CO2inj. Resitivity Target Value	Sensor Threshold Data	RO	RO	RO
16049	AVAL_PTHRES_SET[48]	54	4	hPa	N/A	N/A	N/A		Work vacuum B pressure Target Value	Sensor Threshold Data	RO	RO	RO
16050	AVAL_PTHRES_RESET[0]	54	4	kPa	N/A	N/A	N/A		Main Air Pressure Restart Value	Sensor Threshold Data	RO	RO	RO
16051	AVAL_PTHRES_RESET[1]	54	4	kPa	N/A	N/A	N/A		Clean Air Pressure Restart Value	Sensor Threshold Data	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
16052	AVAL_PTHRES_RESET[2]	54	4	kPa	N/A	N/A	N/A		Water Pressure Restart Value	Sensor Threshold Data	RO	RO	RO
16053	AVAL_PTHRES_RESET[3]	54	4	hPa	N/A	N/A	N/A		C/T Work Vacuum Restart Value	Sensor Threshold Data	RO	RO	RO
16054	AVAL_PTHRES_RESET[4]	54	4	hPa	N/A	N/A	N/A		S/T Work Vacuum Restart Value	Sensor Threshold Data	RO	RW	RW
16055	AVAL_PTHRES_RESET[5]	54	4	100kPa	N/A	N/A	N/A		High Pressure Pump Restart Value	Sensor Threshold Data	RO	RO	RO
16056	AVAL_PTHRES_RESET[6]	54	4	hPa	N/A	N/A	N/A		C/T Table Vacuum Restart Value	Sensor Threshold Data	RO	RW	RW
16057	AVAL_PTHRES_RESET[7]	54	4	hPa	N/A	N/A	N/A		Upper Arm Vacuum Restart Value	Sensor Threshold Data	RO	RW	RW
16058	AVAL_PTHRES_RESET[8]	54	4	hPa	N/A	N/A	N/A		Lower Arm Vacuum Restart Value	Sensor Threshold Data	RO	RW	RW
16059	AVAL_PTHRES_RESET[9]	54	4	%	N/A	N/A	N/A		BBD Level Z1 Restart Value	Sensor Threshold Data	RO	RO	RO
16060	AVAL_PTHRES_RESET[10]	54	4	%	N/A	N/A	N/A		BBD Level Z2 Restart Value	Sensor Threshold Data	RO	RO	RO
16061	AVAL_PTHRES_RESET[11]	54	4	mA	N/A	N/A	N/A		Spindle Current Z1 Restart Value	Sensor Threshold Data	RO	RO	RO
16062	AVAL_PTHRES_RESET[12]	54	4	/min	N/A	N/A	N/A		Spindle Rev. Z1 Restart Value	Sensor Threshold Data	RO	RO	RO
16063	AVAL_PTHRES_RESET[13]	54	4	mA	N/A	N/A	N/A		Spindle Current Z2 Restart Value	Sensor Threshold Data	RO	RO	RO
16064	AVAL_PTHRES_RESET[14]	54	4	/min	N/A	N/A	N/A		Spindle Rev. Z2 Restart Value	Sensor Threshold Data	RO	RO	RO
16065	AVAL_PTHRES_RESET[15]	54	4	mV	N/A	N/A	N/A		NCS Level Z1 Restart Value	Sensor Threshold Data	RO	RO	RO
16066	AVAL_PTHRES_RESET[16]	54	4	mV	N/A	N/A	N/A		NCS Level Z2 Restart Value	Sensor Threshold Data	RO	RO	RO
16067	AVAL_PTHRES_RESET[17]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle Flow Rate Z1 Restart Value	Sensor Threshold Data	RO	RO	RO
16068	AVAL_PTHRES_RESET[18]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle (Rear) Flow Rate Z1 Restart Value	Sensor Threshold Data	RO	RO	RO
16069	AVAL_PTHRES_RESET[19]	54	4	mL/min	N/A	N/A	N/A		Shower Nozzle Flow Rate Z1 Restart Value	Sensor Threshold Data	RO	RO	RO
16070	AVAL_PTHRES_RESET[20]	54	4	mL/min	N/A	N/A	N/A		Spray Nozzle Flow Rate Z1 Restart Value	Sensor Threshold Data	RO	RO	RO
16071	AVAL_PTHRES_RESET[21]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle Flow Rate Z2 Restart Value	Sensor Threshold Data	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
16072	AVAL_PTHRES_RESET[22]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle (Rear) Flow Rate Z2 Restart Value	Sensor Threshold Data	RO	RO	RO
16073	AVAL_PTHRES_RESET[23]	54	4	mL/min	N/A	N/A	N/A		Shower Nozzle Flow Rate Z2 Restart Value	Sensor Threshold Data	RO	RO	RO
16074	AVAL_PTHRES_RESET[24]	54	4	mL/min	N/A	N/A	N/A		Spray Nozzle Flow Rate Z2 Restart Value	Sensor Threshold Data	RO	RO	RO
16075	AVAL_PTHRES_RESET[25]	54	4	0.1degC	N/A	N/A	N/A		Holder Upper Temp Restart Value	Sensor Threshold Data	RO	RO	RO
16076	AVAL_PTHRES_RESET[26]	54	4	0.1degC	N/A	N/A	N/A		Holder Lower Temp Restart Value	Sensor Threshold Data	RO	RO	RO
16077	AVAL_PTHRES_RESET[27]	54	4	0.1degC	N/A	N/A	N/A		NCS Z1 Temp Restart Value	Sensor Threshold Data	RO	RO	RO
16078	AVAL_PTHRES_RESET[28]	54	4	0.1degC	N/A	N/A	N/A		NCS Z2 Temp Restart Value	Sensor Threshold Data	RO	RO	RO
16079	AVAL_PTHRES_RESET[29]	54	4	0.1degC	N/A	N/A	N/A		Column Temp Restart Value	Sensor Threshold Data	RO	RO	RO
16080	AVAL_PTHRES_RESET[30]	54	4	0.1degC	N/A	N/A	N/A		Table Base Temp Restart Value	Sensor Threshold Data	RO	RO	RO
16081	AVAL_PTHRES_RESET[31]	54	4	0.1degC	N/A	N/A	N/A		Theta Base Temp Restart Value	Sensor Threshold Data	RO	RO	RO
16082	AVAL_PTHRES_RESET[32]	54	4	0.1degC	N/A	N/A	N/A		Cutting Water Temp Restart Value	Sensor Threshold Data	RO	RO	RO
16083	AVAL_PTHRES_RESET[33]	54	4	kPa	N/A	N/A	N/A		Atomizing Nozzle Clean air Press.(S/T) Restart Value	Sensor Threshold Data	RO	RO	RO
16084	AVAL_PTHRES_RESET[34]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 1 Restart Value	Sensor Threshold Data	RO	RO	RO
16085	AVAL_PTHRES_RESET[35]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 2 Restart Value	Sensor Threshold Data	RO	RO	RO
16086	AVAL_PTHRES_RESET[36]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 3 Restart Value	Sensor Threshold Data	RO	RO	RO
16087	AVAL_PTHRES_RESET[37]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 4 Restart Value	Sensor Threshold Data	RO	RO	RO
16088	AVAL_PTHRES_RESET[38]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 5 Restart Value	Sensor Threshold Data	RO	RO	RO
16089	AVAL_PTHRES_RESET[39]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 6 Restart Value	Sensor Threshold Data	RO	RO	RO
16090	AVAL_PTHRES_RESET[40]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 7 Restart Value	Sensor Threshold Data	RO	RO	RO
16091	AVAL_PTHRES_RESET[41]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 8 Restart Value	Sensor Threshold Data	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
16092	AVAL_PTHRES_RESET[42]	54	4	hPa	N/A	N/A	N/A		Jig Vacuum pressure Restart Value	Sensor Threshold Data	RO	RO	RO
16093	AVAL_PTHRES_RESET[43]	54	4	hPa	N/A	N/A	N/A		Vacuum pump pressure Restart Value	Sensor Threshold Data	RO	RO	RO
16094	AVAL_PTHRES_RESET[44]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 9 Restart Value	Sensor Threshold Data	RO	RO	RO
16095	AVAL_PTHRES_RESET[45]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 10 Restart Value	Sensor Threshold Data	RO	RO	RO
16096	AVAL_PTHRES_RESET[46]	54	4	mL	N/A	N/A	N/A		CO2inj. TotalFlow Restart Value	Sensor Threshold Data	RO	RO	RO
16097	AVAL_PTHRES_RESET[47]	54	4	kOhm cm	N/A	N/A	N/A		CO2inj. Resitivity Restart Value	Sensor Threshold Data	RO	RO	RO
16098	AVAL_PTHRES_RESET[48]	54	4	hPa	N/A	N/A	N/A		Work vacuum B pressure Restart Value	Sensor Threshold Data	RO	RO	RO
16099	AVAL_THRES_H[0]	54	4	kPa	N/A	N/A	N/A		Main Air Pressure Upper limit	Sensor Threshold Data	RO	RO	RO
16100	AVAL_THRES_H[1]	54	4	kPa	N/A	N/A	N/A		Clean Air Pressure Upper limit	Sensor Threshold Data	RO	RO	RO
16101	AVAL_THRES_H[2]	54	4	kPa	N/A	N/A	N/A		Water Pressure Upper limit	Sensor Threshold Data	RO	RO	RO
16102	AVAL_THRES_H[3]	54	4	hPa	N/A	N/A	N/A		C/T Work Vacuum Upper limit	Sensor Threshold Data	RO	RO	RO
16103	AVAL_THRES_H[4]	54	4	hPa	N/A	N/A	N/A		S/T Work Vacuum Upper limit	Sensor Threshold Data	RO	RO	RO
16104	AVAL_THRES_H[5]	54	4	100kPa	N/A	N/A	N/A		High Pressure Pump Upper limit	Sensor Threshold Data	RO	RW	RW
16105	AVAL_THRES_H[6]	54	4	hPa	N/A	N/A	N/A		C/T Table Vacuum Upper limit	Sensor Threshold Data	RO	RO	RO
16106	AVAL_THRES_H[7]	54	4	hPa	N/A	N/A	N/A		Upper Arm Vacuum Upper limit	Sensor Threshold Data	RO	RO	RO
16107	AVAL_THRES_H[8]	54	4	hPa	N/A	N/A	N/A		Lower Arm Vacuum Upper limit	Sensor Threshold Data	RO	RO	RO
16108	AVAL_THRES_H[9]	54	4	%	N/A	N/A	N/A		BBD Level Z1 Upper limit	Sensor Threshold Data	RO	RO	RO
16109	AVAL_THRES_H[10]	54	4	%	N/A	N/A	N/A		BBD Level Z2 Upper limit	Sensor Threshold Data	RO	RO	RO
16110	AVAL_THRES_H[11]	54	4	mA	N/A	N/A	N/A		Spindle Current Z1 Upper limit	Sensor Threshold Data	RO	RW	RW
16111	AVAL_THRES_H[12]	54	4	/min	N/A	N/A	N/A		Spindle Rev. Z1 Upper limit	Sensor Threshold Data	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
16112	AVAL_THRES_H[13]	54	4	mA	N/A	N/A	N/A		Spindle Current Z2 Upper limit	Sensor Threshold Data	RO	RW	RW
16113	AVAL_THRES_H[14]	54	4	/min	N/A	N/A	N/A		Spindle Rev. Z2 Upper limit	Sensor Threshold Data	RO	RO	RO
16114	AVAL_THRES_H[15]	54	4	mV	N/A	N/A	N/A		NCS Level Z1 Upper limit	Sensor Threshold Data	RO	RO	RO
16115	AVAL_THRES_H[16]	54	4	mV	N/A	N/A	N/A		NCS Level Z2 Upper limit	Sensor Threshold Data	RO	RO	RO
16116	AVAL_THRES_H[17]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle Flow Rate Z1 Upper limit	Sensor Threshold Data	RO	RO	RO
16117	AVAL_THRES_H[18]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle (Rear) Flow Rate Z1 Upper limit	Sensor Threshold Data	RO	RO	RO
16118	AVAL_THRES_H[19]	54	4	mL/min	N/A	N/A	N/A		Shower Nozzle Flow Rate Z1 Upper limit	Sensor Threshold Data	RO	RO	RO
16119	AVAL_THRES_H[20]	54	4	mL/min	N/A	N/A	N/A		Spray Nozzle Flow Rate Z1 Upper limit	Sensor Threshold Data	RO	RO	RO
16120	AVAL_THRES_H[21]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle Flow Rate Z2 Upper limit	Sensor Threshold Data	RO	RO	RO
16121	AVAL_THRES_H[22]	54	4	mL/min	N/A	N/A	N/A		Blade Nozzle (Rear) Flow Rate Z2 Upper limit	Sensor Threshold Data	RO	RO	RO
16122	AVAL_THRES_H[23]	54	4	mL/min	N/A	N/A	N/A		Shower Nozzle Flow Rate Z2 Upper limit	Sensor Threshold Data	RO	RO	RO
16123	AVAL_THRES_H[24]	54	4	mL/min	N/A	N/A	N/A		Spray Nozzle Flow Rate Z2 Upper limit	Sensor Threshold Data	RO	RO	RO
16124	AVAL_THRES_H[25]	54	4	0.1degC	N/A	N/A	N/A		Holder Upper Temp Upper limit	Sensor Threshold Data	RO	RW	RW
16125	AVAL_THRES_H[26]	54	4	0.1degC	N/A	N/A	N/A		Holder Lower Temp Upper limit	Sensor Threshold Data	RO	RW	RW
16126	AVAL_THRES_H[27]	54	4	0.1degC	N/A	N/A	N/A		NCS Z1 Temp Upper limit	Sensor Threshold Data	RO	RW	RW
16127	AVAL_THRES_H[28]	54	4	0.1degC	N/A	N/A	N/A		NCS Z2 Temp Upper limit	Sensor Threshold Data	RO	RW	RW
16128	AVAL_THRES_H[29]	54	4	0.1degC	N/A	N/A	N/A		Column Temp Upper limit	Sensor Threshold Data	RO	RW	RW
16129	AVAL_THRES_H[30]	54	4	0.1degC	N/A	N/A	N/A		Table Base Temp Upper limit	Sensor Threshold Data	RO	RW	RW
16130	AVAL_THRES_H[31]	54	4	0.1degC	N/A	N/A	N/A		Theta Base Temp Upper limit	Sensor Threshold Data	RO	RW	RW
16131	AVAL_THRES_H[32]	54	4	0.1degC	N/A	N/A	N/A		Cutting Water Temp Upper limit	Sensor Threshold Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
16132	AVAL_THRES_H[33]	54	4	kPa	N/A	N/A	N/A		Atomizing Nozzle Clean air Press.(S/T) Upper limit	Sensor Threshold Data	RO	RO	RO
16133	AVAL_THRES_H[34]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 1 Upper limit	Sensor Threshold Data	RO	RO	RO
16134	AVAL_THRES_H[35]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 2 Upper limit	Sensor Threshold Data	RO	RO	RO
16135	AVAL_THRES_H[36]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 3 Upper limit	Sensor Threshold Data	RO	RO	RO
16136	AVAL_THRES_H[37]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 4 Upper limit	Sensor Threshold Data	RO	RO	RO
16137	AVAL_THRES_H[38]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 5 Upper limit	Sensor Threshold Data	RO	RO	RO
16138	AVAL_THRES_H[39]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 6 Upper limit	Sensor Threshold Data	RO	RO	RO
16139	AVAL_THRES_H[40]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 7 Upper limit	Sensor Threshold Data	RO	RO	RO
16140	AVAL_THRES_H[41]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 8 Upper limit	Sensor Threshold Data	RO	RO	RO
16141	AVAL_THRES_H[42]	54	4	hPa	N/A	N/A	N/A		Jig Vacuum pressure Upper limit	Sensor Threshold Data	RO	RO	RO
16142	AVAL_THRES_H[43]	54	4	hPa	N/A	N/A	N/A		Vacuum pump pressure Upper limit	Sensor Threshold Data	RO	RO	RO
16143	AVAL_THRES_H[44]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 9 Upper limit	Sensor Threshold Data	RO	RO	RO
16144	AVAL_THRES_H[45]	54	4	uW/cm2	N/A	N/A	N/A		UV Irradiance 10 Upper limit	Sensor Threshold Data	RO	RO	RO
16145	AVAL_THRES_H[46]	54	4	mL	N/A	N/A	N/A		CO2inj. TotalFlow Upper limit	Sensor Threshold Data	RO	RO	RO
16146	AVAL_THRES_H[47]	54	4	kOhm cm	N/A	N/A	N/A		CO2inj. Resitivity Upper limit	Sensor Threshold Data	RO	RW	RW
16147	AVAL_THRES_H[48]	54	4	hPa	N/A	N/A	N/A		Work vacuum B pressure Upper limit	Sensor Threshold Data	RO	RO	RO
16148	AUTOT_LIGHT	20	n	N/A	N/A	N/A	N/A		Auto Teach Auto light	Auto Teach	RO	RW	RW
16149	AUTOT_FOCUS	20	n	N/A	N/A	N/A	N/A		Auto Teach Auto focus	Auto Teach	RO	RW	RW
16150	AUTOT_SEQ	20	n	N/A	N/A	N/A	N/A		Auto Teach Magnif. seq.	Auto Teach	RO	RW	RW
16151	M_DIR_MAC	34	4	%	0	0	100		Auto Teach Manual light level Macro Dir	Auto Teach	RO	RW	RW
16152	M_OBL_MAC	34	4	%	0	0	100		Auto Teach Manual light level Macro Obl	Auto Teach	RO	RW	RW
16153	M_DIR_MIC	34	4	%	0	0	100		Auto Teach Manual light level Micro Dir	Auto Teach	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
16154	M_OBL_MIC	34	4	%	0	0	100		Auto Teach Manual light level Micro Obl	Auto Teach	RO	RW	RW
16170	SETUP_BY_REV1	54	4	/min	0	0	60000		Change in RPM to trigger Setup Z1	Setup Data1	RO	RW	RW
16171	SETUP_BY_REV2	54	4	/min	0	0	60000		Change in RPM to trigger Setup Z2	Setup Data1	RO	RW	RW
16172	FULL_START_SETUP	20	n	N/A	YES	YES	NO		Perform Setup before starting FullAuto	Setup Data1	RO	RW	RW
16173	AFTER_DRESS_SETUP	20	n	N/A	YES	YES	NO		Perform Setup after Dressing	Setup Data1	RO	RW	RW
16174	DEV_CHG_SETUP	20	n	N/A	YES	YES	NO		Perform Setup when device is changed	Setup Data1	RO	RW	RW
16190	IONIZER_PASS	20	n	N/A	YES	YES	NO		Ionizer	Function Data Maintenance	RO	RW	RW
16191	SCOPE_Z2_PASS	20	n	N/A	YES	YES	NO		Z2 Scope	Function Data Maintenance	RO	RW	RW
16192	CST_CHK_PASS	20	n	N/A	YES	YES	NO		Cassette Size Check	Function Data Maintenance	RO	RW	RW
16201	ICLK_POSE[1]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.1 E/S-0 point	Inspection UV stage data	RO	RW	RW
16202	ICLK_POSE[2]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.2 E/S-0 point	Inspection UV stage data	RO	RW	RW
16203	ICLK_POSE[3]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.3 E/S-0 point	Inspection UV stage data	RO	RW	RW
16204	ICLK_POSE[4]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.4 E/S-0 point	Inspection UV stage data	RO	RW	RW
16205	ICLK_POSE[5]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.5 E/S-0 point	Inspection UV stage data	RO	RW	RW
16206	ICLK_POSE[6]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.6 E/S-0 point	Inspection UV stage data	RO	RW	RW
16208	ICLK_UNLOAD_ADJE[1]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.1 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW
16209	ICLK_UNLOAD_ADJE[2]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.2 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW
16210	ICLK_UNLOAD_ADJE[3]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.3 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW
16211	ICLK_UNLOAD_ADJE[4]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.4 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW
16212	ICLK_UNLOAD_ADJE[5]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.5 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
16213	ICLK_UNLOAD_ADJE[6]	54	4	nm	0	N/A	N/A		Inspection stage Frame No.6 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW
16215	ICLK_LOAD_POSC[1]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.1 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16216	ICLK_LOAD_POSC[2]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.2 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16217	ICLK_LOAD_POSC[3]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.3 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16218	ICLK_LOAD_POSC[4]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.4 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16219	ICLK_LOAD_POSC[5]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.5 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16220	ICLK_LOAD_POSC[6]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.6 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16222	ICLK_UNLOAD_POSC[1]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.1 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16223	ICLK_UNLOAD_POSC[2]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.2 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16224	ICLK_UNLOAD_POSC[3]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.3 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16225	ICLK_UNLOAD_POSC[4]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.4 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16226	ICLK_UNLOAD_POSC[5]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.5 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16227	ICLK_UNLOAD_POSC[6]	54	4	nm	N/A	N/A	N/A		Inspection stage Frame No.6 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16229	UV_POSE[1]	54	4	nm	0	N/A	N/A		UV stage Frame No.1 E/S-0 point	Inspection UV stage data	RO	RW	RW
16230	UV_POSE[2]	54	4	nm	0	N/A	N/A		UV stage Frame No.2 E/S-0 point	Inspection UV stage data	RO	RW	RW
16231	UV_POSE[3]	54	4	nm	0	N/A	N/A		UV stage Frame No.3 E/S-0 point	Inspection UV stage data	RO	RW	RW
16232	UV_POSE[4]	54	4	nm	0	N/A	N/A		UV stage Frame No.4 E/S-0 point	Inspection UV stage data	RO	RW	RW
16233	UV_POSE[5]	54	4	nm	0	N/A	N/A		UV stage Frame No.5 E/S-0 point	Inspection UV stage data	RO	RW	RW
16234	UV_POSE[6]	54	4	nm	0	N/A	N/A		UV stage Frame No.6 E/S-0 point	Inspection UV stage data	RO	RW	RW
16236	UV_UNLOAD_ADJE[1]	54	4	nm	0	N/A	N/A		UV stage Frame No.1 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
16237	UV_UNLOAD_ADJE[2]	54	4	nm	0	N/A	N/A		UV stage Frame No.2 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW
16238	UV_UNLOAD_ADJE[3]	54	4	nm	0	N/A	N/A		UV stage Frame No.3 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW
16239	UV_UNLOAD_ADJE[4]	54	4	nm	0	N/A	N/A		UV stage Frame No.4 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW
16240	UV_UNLOAD_ADJE[5]	54	4	nm	0	N/A	N/A		UV stage Frame No.5 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW
16241	UV_UNLOAD_ADJE[6]	54	4	nm	0	N/A	N/A		UV stage Frame No.6 Elevator pos. at unload	Inspection UV stage data	RO	RW	RW
16243	UV_LOAD_POSC[1]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.1 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16244	UV_LOAD_POSC[2]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.2 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16245	UV_LOAD_POSC[3]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.3 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16246	UV_LOAD_POSC[4]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.4 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16247	UV_LOAD_POSC[5]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.5 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16248	UV_LOAD_POSC[6]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.6 Push-pull pos. at load	Inspection UV stage data	RO	RW	RW
16250	UV_UNLOAD_POSC[1]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.1 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16251	UV_UNLOAD_POSC[2]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.2 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16252	UV_UNLOAD_POSC[3]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.3 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16253	UV_UNLOAD_POSC[4]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.4 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16254	UV_UNLOAD_POSC[5]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.5 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16255	UV_UNLOAD_POSC[6]	54	4	nm	N/A	N/A	N/A		UV stage Frame No.6 Push-pull pos. at unload	Inspection UV stage data	RO	RW	RW
16260	SCOPE_SCOPEX	54	4	nm	N/A	N/A	N/A		Z1-Z2 Scope distance(X)	Alignment Function Data	RO	RW	RW
16270	FLOW_KAI_SET[0]	34	4	%	100	0	100		Valve travel of Blade cooler Z1	Flow Rate Control Maintenece	RO	RW	RW
16272	FLOW_KAI_SET[2]	34	4	%	100	0	100		Valve travel of Shower Z1	Flow Rate Control Maintenece	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
16273	FLOW_KAI_SET[3]	34	4	%	100	0	100		Valve travel of Spray Z1	Flow Rate Control Maintenecece	RO	RW	RW
16274	FLOW_KAI_SET[4]	34	4	%	100	0	100		Valve travel of Blade cooler Z2	Flow Rate Control Maintenecece	RO	RW	RW
16276	FLOW_KAI_SET[6]	34	4	%	100	0	100		Valve travel of Shower Z2	Flow Rate Control Maintenecece	RO	RW	RW
16277	FLOW_KAI_SET[7]	34	4	%	100	0	100		Valve travel of Spray Z2	Flow Rate Control Maintenecece	RO	RW	RW
16280	CT_BLOW_T	54	4	sec	0	0	N/A		C/T Blow time	User Define Data	RO	RW	RW
16281	ST_BLOW_T	54	4	sec	0	0	N/A		S/T Blow time	User Define Data	RO	RW	RW
16282	HIPRES_TIME	54	4	sec	0	0	N/A		Down limit time (Spinner section)	User Define Data	RO	RW	RW
16283	ALI_T_ADJ	54	4	10^-6deg	0	-100000	100000		Theta-axis adjust to 90 degrees	User Define Data	RO	RW	RW
16284	ENERGYSAVE_TIME	54	4	sec	0	0	N/A		Waittime for energysaving	User Define Data	RO	RW	RW
16285	S_CLR	20	n	N/A	CLEAR	KEEP	CLEAR		Device change cut speed	User Define Data	RO	RW	RW
16286	S_CHG	20	n	N/A	YES	YES	SPEED		utting speed change	User Define Data	RO	RW	RW
16287	BBD_TIMING	20	n	N/A	RECHCK	Z-EM	RECHECK		BBD timing	User Define Data	RO	RW	RW
16288	CHKCUT_MODE	20	n	N/A	NO	NO	ALWAYS		Cut work check when alignment	User Define Data	RO	RW	RW
16289	FRAME_CHK	20	n	N/A	SENSOR	CLAMP	SENSOR		Frame check On/Off	User Define Data	RO	RW	RW
16290	LOAD_FROM	20	n	N/A	BOTTOM	BOTTOM	TOP_SIDE		Start pos. for loading	User Define Data	RO	RW	RW
16291	ICLK_MODE	20	n	N/A	STOP	STOP	COTINUE		In Inspection Fullauto	User Define Data	RO	RW	RW
16292	FDRS_BACK	34	4	nm	N/A	N/A	N/A		Pos. after edge dress	User Define Data	RO	RW	RW
16293	JOG_LIMZW	54	4	nm	N/A	0	N/A		Flange Dressing Z-axis down limit	User Define Data	RO	RW	RW
16294	HAIR_LIMIT	54	4	nm	N/A	10000	80000000		Hairline adjust limit	User Define Data	RO	RW	RW
16295	CDU_PASS	20	n	N/A	YES	NO	YES		CO2 Injector	User Define Data	RO	RW	RW
16296	H_CHG	20	n	N/A	YES	NO	YES		Cutting height change	User Define Data	RO	RW	RW
16297	BBD_SPD_OFF	20	n	N/A	YES	NO	YES		Stop spindle by B.B.D.	User Define Data	RO	RW	RW
16298	KC_ALU_FRE	20	n	N/A	YES	NO	YES		Freeze to kerf check	User Define Data	RO	RW	RW
16299	CST_1ST_CAL	20	n	N/A	YES	NO	YES		1st-cassette operator call	User Define Data	RO	RW	RW
16300	OP_INDIVI_CUTADJ	20	n	N/A	NO	NO	YES		Individual CutAdj (Z2)	User Define Data	RO	RW	RW
16301	HAIR_WARN	54	4	nm	0	0	80000000		Warning threshold for Hairline adjust	User Define Data	RO	RW	RW
16302	CUTPOS_WARN	54	4	nm	0	0	10000000		Warning threshold for Cut pos. adjust	User Define Data	RO	RW	RW
24000	CL_WASH_TIME	54	4	sec	0	0	999		Washing time	Cleaning Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
24001	CL__WASH_REV	54	4	/min	0	0	3000		Washing revolution	Cleaning Data	RO	RW	RW
24002	CL__RINSE_TIME	54	4	sec	0	0	999		Rinsing time	Cleaning Data	RO	RW	RW
24003	CL__RINSE_REV	54	4	/min	0	0	3000		Rinsing revolution	Cleaning Data	RO	RW	RW
24004	CL__DRY_TIME	54	4	sec	0	0	999		Drying time	Cleaning Data	RO	RW	RW
24005	CL__DRY_REV	54	4	/min	0	0	3000		Drying revolution	Cleaning Data	RO	RW	RW
24006	CL__TWASH_TIME	54	4	sec	0	0	999		Table washing time	Cleaning Data	RO	RW	RW
24007	CL__TWASH_REV	54	4	/min	0	0	3000		Table washing revolution	Cleaning Data	RO	RW	RW
24008	CL__TDRY_TIME	54	4	sec	0	0	999		Table drying time	Cleaning Data	RO	RW	RW
24009	CL__TDRY_REV	54	4	/min	0	0	3000		Table drying revolution	Cleaning Data	RO	RW	RW
24010	CL__TWASH_NO	54	4	works	0	0	999		Table drying frequency	Cleaning Data	RO	RW	RW
24011	CL__TABLE_DEG	54	4	10^-3deg	0	0	360000		Table positioning angle	Cleaning Data	RO	RW	RW
24012	CL__WASH_SIZE	54	4	N/A	0	0	WORK_MAX		Washing stroke	Cleaning Data	RO	RW	RW
24013	CL__W_USERPRG	20	n	N/A	N/A	YES	NO		Custom cleaning program	Cleaning Data	RO	RW	RW
24014	CL__ITEM[0]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.1 Item	Custom Cleaning Program	RO	RW	RW
24015	CL__ITEM[1]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.2 Item	Custom Cleaning Program	RO	RW	RW
24016	CL__ITEM[2]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.3 Item	Custom Cleaning Program	RO	RW	RW
24017	CL__ITEM[3]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.4 Item	Custom Cleaning Program	RO	RW	RW
24018	CL__ITEM[4]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.5 Item	Custom Cleaning Program	RO	RW	RW
24019	CL__ITEM[5]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.6 Item	Custom Cleaning Program	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
24020	CL__ITEM[6]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.7 Item	Custom Cleaning Program	RO	RW	RW
24021	CL__ITEM[7]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.8 Item	Custom Cleaning Program	RO	RW	RW
24022	CL__ITEM[8]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.9 Item	Custom Cleaning Program	RO	RW	RW
24023	CL__ITEM[9]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.10 Item	Custom Cleaning Program	RO	RW	RW
24024	CL__ITEM[10]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.11 Item	Custom Cleaning Program	RO	RW	RW
24025	CL__ITEM[11]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.12 Item	Custom Cleaning Program	RO	RW	RW
24026	CL__ITEM[12]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.13 Item	Custom Cleaning Program	RO	RW	RW
24027	CL__ITEM[13]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.14 Item	Custom Cleaning Program	RO	RW	RW
24028	CL__ITEM[14]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.15 Item	Custom Cleaning Program	RO	RW	RW
24029	CL__W_TIME[0]	54	4	sec	0	0	999		Custom Cleaning Program Seq.1 Time	Custom Cleaning Program	RO	RW	RW
24030	CL__W_TIME[1]	54	4	sec	0	0	999		Custom Cleaning Program Seq.2 Time	Custom Cleaning Program	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
24031	CL__W_TIME[2]	54	4	sec	0	0	999		Custom Cleaning Program Seq.3 Time	Custom Cleaning Program	RO	RW	RW
24032	CL__W_TIME[3]	54	4	sec	0	0	999		Custom Cleaning Program Seq.4 Time	Custom Cleaning Program	RO	RW	RW
24033	CL__W_TIME[4]	54	4	sec	0	0	999		Custom Cleaning Program Seq.5 Time	Custom Cleaning Program	RO	RW	RW
24034	CL__W_TIME[5]	54	4	sec	0	0	999		Custom Cleaning Program Seq.6 Time	Custom Cleaning Program	RO	RW	RW
24035	CL__W_TIME[6]	54	4	sec	0	0	999		Custom Cleaning Program Seq.7 Time	Custom Cleaning Program	RO	RW	RW
24036	CL__W_TIME[7]	54	4	sec	0	0	999		Custom Cleaning Program Seq.8 Time	Custom Cleaning Program	RO	RW	RW
24037	CL__W_TIME[8]	54	4	sec	0	0	999		Custom Cleaning Program Seq.9 Time	Custom Cleaning Program	RO	RW	RW
24038	CL__W_TIME[9]	54	4	sec	0	0	999		Custom Cleaning Program Seq.10 Time	Custom Cleaning Program	RO	RW	RW
24039	CL__W_TIME[10]	54	4	sec	0	0	999		Custom Cleaning Program Seq.11 Time	Custom Cleaning Program	RO	RW	RW
24040	CL__W_TIME[11]	54	4	sec	0	0	999		Custom Cleaning Program Seq.12 Time	Custom Cleaning Program	RO	RW	RW
24041	CL__W_TIME[12]	54	4	sec	0	0	999		Custom Cleaning Program Seq.13 Time	Custom Cleaning Program	RO	RW	RW
24042	CL__W_TIME[13]	54	4	sec	0	0	999		Custom Cleaning Program Seq.14 Time	Custom Cleaning Program	RO	RW	RW
24043	CL__W_TIME[14]	54	4	sec	0	0	999		Custom Cleaning Program Seq.15 Time	Custom Cleaning Program	RO	RW	RW
24044	CL__W_REV[0]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.1 Revolution	Custom Cleaning Program	RO	RW	RW
24045	CL__W_REV[1]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.2 Revolution	Custom Cleaning Program	RO	RW	RW
24046	CL__W_REV[2]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.3 Revolution	Custom Cleaning Program	RO	RW	RW
24047	CL__W_REV[3]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.4 Revolution	Custom Cleaning Program	RO	RW	RW
24048	CL__W_REV[4]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.5 Revolution	Custom Cleaning Program	RO	RW	RW
24049	CL__W_REV[5]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.6 Revolution	Custom Cleaning Program	RO	RW	RW
24050	CL__W_REV[6]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.7 Revolution	Custom Cleaning Program	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
24051	CL__W_REV[7]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.8 Revolution	Custom Cleaning Program	RO	RW	RW
24052	CL__W_REV[8]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.9 Revolution	Custom Cleaning Program	RO	RW	RW
24053	CL__W_REV[9]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.10 Revolution	Custom Cleaning Program	RO	RW	RW
24054	CL__W_REV[10]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.11 Revolution	Custom Cleaning Program	RO	RW	RW
24055	CL__W_REV[11]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.12 Revolution	Custom Cleaning Program	RO	RW	RW
24056	CL__W_REV[12]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.13 Revolution	Custom Cleaning Program	RO	RW	RW
24057	CL__W_REV[13]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.14 Revolution	Custom Cleaning Program	RO	RW	RW
24058	CL__W_REV[14]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.15 Revolution	Custom Cleaning Program	RO	RW	RW
24059	CC__WASH_TIME	54	4	sec	0	0	999		Washing time	Common Cleaning Data	RO	RW	RW
24060	CC__WASH_REV	54	4	/min	0	0	3000		Washing revolution	Common Cleaning Data	RO	RW	RW
24061	CC__RINSE_TIME	54	4	sec	0	0	999		Rinsing time	Common Cleaning Data	RO	RW	RW
24062	CC__RINSE_REV	54	4	/min	0	0	3000		Rinsing revolution	Common Cleaning Data	RO	RW	RW
24063	CC__DRY_TIME	54	4	sec	0	0	999		Drying time	Common Cleaning Data	RO	RW	RW
24064	CC__DRY_REV	54	4	/min	0	0	3000		Drying revolution	Common Cleaning Data	RO	RW	RW
24065	CC__TWASH_TIME	54	4	sec	0	0	999		Table washing time	Common Cleaning Data	RO	RW	RW
24066	CC__TWASH_REV	54	4	/min	0	0	3000		Table washing revolution	Common Cleaning Data	RO	RW	RW
24067	CC__TDRY_TIME	54	4	sec	0	0	999		Table drying time	Common Cleaning Data	RO	RW	RW
24068	CC__TDRY_REV	54	4	/min	0	0	3000		Table drying revolution	Common Cleaning Data	RO	RW	RW
24069	CC__TWASH_NO	54	4	works	0	0	999		Table drying frequency	Common Cleaning Data	RO	RW	RW
24070	CC__TABLE_DEG	54	4	10^-3deg	0	0	360000		Table positioning angle	Common Cleaning Data	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
24071	CC__WASH_SIZE	54	4	N/A	0	0	WORK_MAX		Washing stroke	Common Cleaning Data	RO	RW	RW
24072	CC__W_USERPRG	20	n	N/A	N/A	YES	NO		Custom cleaning program	Common Cleaning Data	RO	RW	RW
24073	CC__ITEM[0]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.1 Item	Common Custom Cleaning Program	RO	RW	RW
24074	CC__ITEM[1]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.2 Item	Common Custom Cleaning Program	RO	RW	RW
24075	CC__ITEM[2]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.3 Item	Common Custom Cleaning Program	RO	RW	RW
24076	CC__ITEM[3]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.4 Item	Common Custom Cleaning Program	RO	RW	RW
24077	CC__ITEM[4]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.5 Item	Common Custom Cleaning Program	RO	RW	RW
24078	CC__ITEM[5]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.6 Item	Common Custom Cleaning Program	RO	RW	RW
24079	CC__ITEM[6]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.7 Item	Common Custom Cleaning Program	RO	RW	RW
24080	CC__ITEM[7]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.8 Item	Common Custom Cleaning Program	RO	RW	RW
24081	CC__ITEM[8]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "***"	Custom Cleaning Program Seq.9 Item	Common Custom Cleaning Program	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
24082	CC__ITEM[9]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "*****"	Custom Cleaning Program Seq.10 Item	Common Custom Cleaning Program	RO	RW	RW
24083	CC__ITEM[10]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "*****"	Custom Cleaning Program Seq.11 Item	Common Custom Cleaning Program	RO	RW	RW
24084	CC__ITEM[11]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "*****"	Custom Cleaning Program Seq.12 Item	Common Custom Cleaning Program	RO	RW	RW
24085	CC__ITEM[12]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "*****"	Custom Cleaning Program Seq.13 Item	Common Custom Cleaning Program	RO	RW	RW
24086	CC__ITEM[13]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "*****"	Custom Cleaning Program Seq.14 Item	Common Custom Cleaning Program	RO	RW	RW
24087	CC__ITEM[14]	20	n	N/A	N/A	*	WASH	"WASH" "RINSE" "DRY" "*****"	Custom Cleaning Program Seq.15 Item	Common Custom Cleaning Program	RO	RW	RW
24088	CC__W_TIME[0]	54	4	sec	0	0	999		Custom Cleaning Program Seq.1 Time	Common Custom Cleaning Program	RO	RW	RW
24089	CC__W_TIME[1]	54	4	sec	0	0	999		Custom Cleaning Program Seq.2 Time	Common Custom Cleaning Program	RO	RW	RW
24090	CC__W_TIME[2]	54	4	sec	0	0	999		Custom Cleaning Program Seq.3 Time	Common Custom Cleaning Program	RO	RW	RW
24091	CC__W_TIME[3]	54	4	sec	0	0	999		Custom Cleaning Program Seq.4 Time	Common Custom Cleaning Program	RO	RW	RW
24092	CC__W_TIME[4]	54	4	sec	0	0	999		Custom Cleaning Program Seq.5 Time	Common Custom Cleaning Program	RO	RW	RW
24093	CC__W_TIME[5]	54	4	sec	0	0	999		Custom Cleaning Program Seq.6 Time	Common Custom Cleaning Program	RO	RW	RW
24094	CC__W_TIME[6]	54	4	sec	0	0	999		Custom Cleaning Program Seq.7 Time	Common Custom Cleaning Program	RO	RW	RW
24095	CC__W_TIME[7]	54	4	sec	0	0	999		Custom Cleaning Program Seq.8 Time	Common Custom Cleaning Program	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
24096	CC__W_TIME[8]	54	4	sec	0	0	999		Custom Cleaning Program Seq.9 Time	Common Custom Cleaning Program	RO	RW	RW
24097	CC__W_TIME[9]	54	4	sec	0	0	999		Custom Cleaning Program Seq.10 Time	Common Custom Cleaning Program	RO	RW	RW
24098	CC__W_TIME[10]	54	4	sec	0	0	999		Custom Cleaning Program Seq.11 Time	Common Custom Cleaning Program	RO	RW	RW
24099	CC__W_TIME[11]	54	4	sec	0	0	999		Custom Cleaning Program Seq.12 Time	Common Custom Cleaning Program	RO	RW	RW
24100	CC__W_TIME[12]	54	4	sec	0	0	999		Custom Cleaning Program Seq.13 Time	Common Custom Cleaning Program	RO	RW	RW
24101	CC__W_TIME[13]	54	4	sec	0	0	999		Custom Cleaning Program Seq.14 Time	Common Custom Cleaning Program	RO	RW	RW
24102	CC__W_TIME[14]	54	4	sec	0	0	999		Custom Cleaning Program Seq.15 Time	Common Custom Cleaning Program	RO	RW	RW
24103	CC__W_REV[0]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.1 Revolution	Common Custom Cleaning Program	RO	RW	RW
24104	CC__W_REV[1]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.2 Revolution	Common Custom Cleaning Program	RO	RW	RW
24105	CC__W_REV[2]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.3 Revolution	Common Custom Cleaning Program	RO	RW	RW
24106	CC__W_REV[3]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.4 Revolution	Common Custom Cleaning Program	RO	RW	RW
24107	CC__W_REV[4]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.5 Revolution	Common Custom Cleaning Program	RO	RW	RW
24108	CC__W_REV[5]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.6 Revolution	Common Custom Cleaning Program	RO	RW	RW
24109	CC__W_REV[6]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.7 Revolution	Common Custom Cleaning Program	RO	RW	RW
24110	CC__W_REV[7]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.8 Revolution	Common Custom Cleaning Program	RO	RW	RW
24111	CC__W_REV[8]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.9 Revolution	Common Custom Cleaning Program	RO	RW	RW
24112	CC__W_REV[9]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.10 Revolution	Common Custom Cleaning Program	RO	RW	RW
24113	CC__W_REV[10]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.11 Revolution	Common Custom Cleaning Program	RO	RW	RW
24114	CC__W_REV[11]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.12 Revolution	Common Custom Cleaning Program	RO	RW	RW
24115	CC__W_REV[12]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.13 Revolution	Common Custom Cleaning Program	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
24116	CC__W_REV[13]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.14 Revolution	Common Custom Cleaning Program	RO	RW	RW
24117	CC__W_REV[14]	54	4	/min	0	0	3000		Custom Cleaning Program Seq.15 Revolution	Common Custom Cleaning Program	RO	RW	RW
24360	DE__UNIT_DEV	20	n	N/A	N/A	mm	inch		Unit	Device Data	RO	RW	RW
24361	DE__SPNDL_REV	54	4	/min	0	0	60000		Spindle revolution Z1	Device Data	RO	RW	RW
24362	DE__SPNDL_REV2	54	4	/min	0	0	60000		Spindle revolution Z2	Device Data	RO	RW	RW
24363	DE__WORK_SIZE1	54	4	nm	0	0	300000000		Square work size CH1	Device Data	RO	RW	RW
24373	DE__WORK_THICK	54	4	nm	0	0	10000000		Work thickness	Device Data	RO	RW	RW
24374	DE__TAPE_THICK	54	4	nm	0	0	100000		Tape thickness	Device Data	RO	RW	RW
24375	DE__CH1_SPD[0]	54	4	nm/sec	0	0	600000000		CH1 Feed speed	Device Data	RO	RW	RW
24376	DE__CH1_SPD[1]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 1	Sub Index Data	RO	RW	RW
24377	DE__CH1_SPD[2]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 2	Sub Index Data	RO	RW	RW
24378	DE__CH1_SPD[3]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 3	Sub Index Data	RO	RW	RW
24379	DE__CH1_SPD[4]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 4	Sub Index Data	RO	RW	RW
24380	DE__CH1_SPD[5]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 5	Sub Index Data	RO	RW	RW
24381	DE__CH1_SPD[6]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 6	Sub Index Data	RO	RW	RW
24382	DE__CH1_SPD[7]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 7	Sub Index Data	RO	RW	RW
24385	DE__CH1_IDX[0]	54	4	nm	0	0	300000000		CH1 Y index 1	Device Data	RO	RW	RW
24386	DE__CH1_IDX[1]	54	4	nm	0	0	300000000		CH1 Y index 2	Sub Index Data	RO	RW	RW
24387	DE__CH1_IDX[2]	54	4	nm	0	0	300000000		CH1 Y index 3	Sub Index Data	RO	RW	RW
24388	DE__CH1_IDX[3]	54	4	nm	0	0	300000000		CH1 Y index 4	Sub Index Data	RO	RW	RW
24389	DE__CH1_IDX[4]	54	4	nm	0	0	300000000		CH1 Y index 5	Sub Index Data	RO	RW	RW
24390	DE__CH1_IDX[5]	54	4	nm	0	0	300000000		CH1 Y index 6	Sub Index Data	RO	RW	RW
24391	DE__CH1_IDX[6]	54	4	nm	0	0	300000000		CH1 Y index 7	Sub Index Data	RO	RW	RW
24392	DE__CH1_IDX[7]	54	4	nm	0	0	300000000		CH1 Y index 8	Sub Index Data	RO	RW	RW
24395	DE__WATER_SPDX	34	4	nm/sec	0	10000000	400000000		Air curtain sweep speed	Cleaning Data	RO	RW	RW
24396	DE__KC_OBJECT	20	n	N/A	CENTER	LOWER	CENTER	"CENTER" "UPPER" "LOWER"	Check object	Kerf Check Data2	RO	RW	RW
24397	DE__KC_WIDTH	34	4	N/A	1	1	9		Window width	Kerf Check Data2	RO	RW	RW
24398	DE__KC_SENSE[0]	34	4	N/A	0	0	3		Sensitivity	Kerf Check Data2	RO	RW	RW
24399	DE__KC_SENSE[1]	34	4	N/A	0	0	3		Sensitivity	Kerf Check Data2	RO	RW	RW
24400	DE__KC_PNT_LIM	34	4	%	0	0	99		Kerf score Z1	Kerf Check Data	RO	RW	RW
24643	DR__SPNDL_REV	54	4	/min	0	0	60000		Spindle revolution Z1	Blade Dress Program	RO	RW	RW
24644	DR__SPNDL_REV2	54	4	/min	0	0	60000		Spindle revolution Z2	Blade Dress Program	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
24645	DR__WORK_THICK	54	4	nm	0	0	10000000		Work thickness	Blade Dress Program	RO	RW	RW
24646	DR__TAPE_THICK	54	4	nm	0	0	100000		Tape thickness	Blade Dress Program	RO	RW	RW
24647	F__SPNDL_REV	54	4	/min	0	0	60000		Spindle revolution Z1	Flange Dressing	RO	RW	RW
24648	F__WORK_SIZE1	54	4	nm	0	0	300000000		Square work size CH1	Flange Dressing	RO	RW	RW
24649	F__CH1_SPD[0]	54	4	nm/sec	0	0	600000000		CH1 Feed speed	Flange Dressing	RO	RW	RW
24650	F__CH1_SPD[1]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 1	Flange Dressing	RO	RW	RW
24651	F__CH1_SPD[2]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 2	Flange Dressing	RO	RW	RW
24652	F__CH1_SPD[3]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 3	Flange Dressing	RO	RW	RW
24653	F__CH1_SPD[4]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 4	Flange Dressing	RO	RW	RW
24654	F__CH1_SPD[5]	54	4	nm/sec	0	0	600000000		CH1 Feed speed 5	Flange Dressing	RO	RW	RW
24655	F__CH1_IDX[0]	54	4	nm	0	0	300000000		CH1 Y index 1	Flange Dressing	RO	RW	RW
24656	F__CH1_IDX[1]	54	4	nm	0	0	300000000		CH1 Y index 2	Flange Dressing	RO	RW	RW
24657	F__CH1_IDX[2]	54	4	nm	0	0	300000000		CH1 Y index 3	Flange Dressing	RO	RW	RW
24658	F__CH1_IDX[3]	54	4	nm	0	0	300000000		CH1 Y index 4	Flange Dressing	RO	RW	RW
24659	F__CH1_IDX[4]	54	4	nm	0	0	300000000		CH1 Y index 5	Flange Dressing	RO	RW	RW
24660	F__CH1_IDX[5]	54	4	nm	0	0	300000000		CH1 Y index 6	Flange Dressing	RO	RW	RW
24661	H__UNIT_DEV	20	n	N/A	N/A	mm	inch		Unit	Hairline Alignment	RO	RW	RW
24662	H__SPNDL_REV	54	4	/min	0	0	60000		Spindle revolution Z1	Hairline Alignment	RO	RW	RW
24663	H__SPNDL_REV2	54	4	/min	0	0	60000		Spindle revolution Z2	Hairline Alignment	RO	RW	RW
24664	H__WORK_THICK	54	4	nm	0	0	10000000		Work thickness	Hairline Alignment	RO	RW	RW
24665	H__TAPE_THICK	54	4	nm	0	0	100000		Tape thickness	Hairline Alignment	RO	RW	RW
24666	H__WATER_SPDX	34	4	nm/sec	0	10000000	400000000		Air curtain sweep speed	Hairline Alignment	RO	RW	RW
24667	H__KC_OBJECT	20	n	N/A	CENTER	LOWER	CENTER	"CENTER" "UPPER" "LOWER"	Check object	Hairline Alignment	RO	RW	RW
24668	H__KC_WIDTH	34	4	N/A	1	1	9		Window width	Hairline Alignment	RO	RW	RW
24669	H__KC_SENSE	34	4	N/A	0	0	3		Sensitivity	Hairline Alignment	RO	RW	RW
24670	H__KC_PNT_LIM	34	4	%	0	0	99		Kerf score Z1	Hairline Alignment	RO	RW	RW
24671	R__UNIT_DEV	20	n	N/A	N/A	mm	inch		Unit	Rotation Alignment	RO	RW	RW
24672	R__SPNDL_REV	54	4	/min	0	0	60000		Spindle revolution Z1	Rotation Alignment	RO	RW	RW
24673	R__WORK_THICK	54	4	nm	0	0	10000000		Work thickness	Rotation Alignment	RO	RW	RW
24674	R__TAPE_THICK	54	4	nm	0	0	100000		Tape thickness	Rotation Alignment	RO	RW	RW
24675	R__WATER_SPDX	34	4	nm/sec	0	10000000	400000000		Air curtain sweep speed	Rotation Alignment	RO	RW	RW
24676	S__SPNDL_REV	54	4	/min	0	0	60000		Spindle revolution Z1	Setup Data1	RO	RW	RW
24677	S__SPNDL_REV2	54	4	/min	0	0	60000		Spindle revolution Z2	Setup Data1	RO	RW	RW

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
24678	T_SPNDL_REV	54	4	/min	0	0	60000		Spindle revolution Z2	Tape Hairline Alignment	RO	RW	RW
24679	KC_CUT_LEN	54	4	mm	0	0	999999000		Cut Length	Kerf Check Data	RO	RW	RW
24680	KC_CHECK_LEN	34	4	mm	0	-999999000	999999000		Check Pos.	Kerf Check Data	RO	RW	RW
24683	T_SPNDL_REV2	54	4	/min	0	0	60000		Spindle revolution Z2	Tape Hairline Alignment	RO	RW	RW
24684	PRECUT_WORK1	34	4	N/A	N/A	N/A	N/A		Conditioning Board SlotNo. (Z1)	Blade Conditioning Board Setting	RO	RO	RO
24685	PRECUT_WORK2	34	4	N/A	N/A	N/A	N/A		Conditioning Board SlotNo. (Z2)	Blade Conditioning Board Setting	RO	RO	RO
24686	KC_CHIPMASK	20	n	N/A	NO	NO	YES		TEG mask	Kerf Check Data2	RO	RW	RW
24687	KC_PWIDTH[0]	34	4	nm	0	0	1000000		Max.mask width CH1	Kerf Check Data2	RO	RW	RW
24688	KC_PWIDTH[1]	34	4	nm	0	0	1000000		Max.mask width CH2	Kerf Check Data2	RO	RW	RW
24689	KC_PWIDTH[2]	34	4	nm	0	0	1000000		Max.mask width CH3	Kerf Check Data2	RO	RW	RW
24690	KC_PWIDTH[3]	34	4	nm	0	0	1000000		Max.mask width CH4	Kerf Check Data2	RO	RW	RW
24691	KC_PWIDTH[4]	34	4	nm	0	0	1000000		Max.mask width CH5	Kerf Check Data2	RO	RW	RW
24692	KC_PWIDTH[5]	34	4	nm	0	0	1000000		Max.mask width CH6	Kerf Check Data2	RO	RW	RW
24693	KC_PWIDTH[6]	34	4	nm	0	0	1000000		Max.mask width CH7	Kerf Check Data2	RO	RW	RW
24694	KC_PWIDTH[7]	34	4	nm	0	0	1000000		Max.mask width CH8	Kerf Check Data2	RO	RW	RW
24695	KC_PWIDTH[8]	34	4	nm	0	0	1000000		Max.mask width CH9	Kerf Check Data2	RO	RW	RW
24696	KC_PWIDTH[9]	34	4	nm	0	0	1000000		Max.mask width CH10	Kerf Check Data2	RO	RW	RW
24697	KC_STR_LIM[0]	34	4	nm	0	0	1000000		Street width limit CH1	Kerf Check Data2	RO	RW	RW
24698	KC_STR_LIM[1]	34	4	nm	0	0	1000000		Street width limit CH2	Kerf Check Data2	RO	RW	RW
24699	KC_STR_LIM[2]	34	4	nm	0	0	1000000		Street width limit CH3	Kerf Check Data2	RO	RW	RW
24700	KC_STR_LIM[3]	34	4	nm	0	0	1000000		Street width limit CH4	Kerf Check Data2	RO	RW	RW
24701	KC_STR_LIM[4]	34	4	nm	0	0	1000000		Street width limit CH5	Kerf Check Data2	RO	RW	RW
24702	KC_STR_LIM[5]	34	4	nm	0	0	1000000		Street width limit CH6	Kerf Check Data2	RO	RW	RW
24703	KC_STR_LIM[6]	34	4	nm	0	0	1000000		Street width limit CH7	Kerf Check Data2	RO	RW	RW
24704	KC_STR_LIM[7]	34	4	nm	0	0	1000000		Street width limit CH8	Kerf Check Data2	RO	RW	RW
24705	KC_STR_LIM[8]	34	4	nm	0	0	1000000		Street width limit CH9	Kerf Check Data2	RO	RW	RW
24706	KC_STR_LIM[9]	34	4	nm	0	0	1000000		Street width limit CH10	Kerf Check Data2	RO	RW	RW
24707	KC_MSENSE[0]	34	4	N/A	1	1	9		Mask sensitivity CH1	Kerf Check Data2	RO	RO	RO
24708	KC_MSENSE[1]	34	4	N/A	1	1	9		Mask sensitivity CH2	Kerf Check Data2	RO	RO	RO
24709	KC_MSENSE[2]	34	4	N/A	1	1	9		Mask sensitivity CH3	Kerf Check Data2	RO	RO	RO
24710	KC_MSENSE[3]	34	4	N/A	1	1	9		Mask sensitivity CH4	Kerf Check Data2	RO	RO	RO
24711	KC_MSENSE[4]	34	4	N/A	1	1	9		Mask sensitivity CH5	Kerf Check Data2	RO	RO	RO
24712	KC_MSENSE[5]	34	4	N/A	1	1	9		Mask sensitivity CH6	Kerf Check Data2	RO	RO	RO
24713	KC_MSENSE[6]	34	4	N/A	1	1	9		Mask sensitivity CH7	Kerf Check Data2	RO	RO	RO

ECID (Continued)

ECID	ECNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
24714	KC_MSENSE[7]	34	4	N/A	1	1	9		Mask sensitivity CH8	Kerf Check Data2	RO	RO	RO
24715	KC_MSENSE[8]	34	4	N/A	1	1	9		Mask sensitivity CH9	Kerf Check Data2	RO	RO	RO
24716	KC_MSENSE[9]	34	4	N/A	1	1	9		Mask sensitivity CH10	Kerf Check Data2	RO	RO	RO

1 – 3. List of Discrete Variables (DV)

DVID

DVID	DVNAME	Format	Bytes	Unit	Default	Min	Max	Values	Comment	Screen Name	Host Access		
											In Process	Remote	Local
7002	PPNEWNAME	20	n	N/A	N/A	N/A	N/A		PPNAME(Created or after renamed)	Discrete Variables	RO	RO	RO
7003	EventLimit	54	4	N/A	N/A	N/A	N/A		Event Limit	Discrete Variables	RO	RO	RO
7004	LimitVariable	54	4	N/A	N/A	N/A	N/A		Limit Variable	Discrete Variables	RO	RO	RO
7005	TransitionType	10	1	N/A	N/A	N/A	N/A	<Limit width transit direction> 0=Downward 1=Upward	Transition Type	Discrete Variables	RO	RO	RO
7010	AlarmsSet	0	n	N/A	N/A	N/A	N/A		Alarm set list	Discrete Variables	RO	RO	RO
7011	AlarmID	54	4	N/A	N/A	N/A	N/A		Alarm ID	Discrete Variables	RO	RO	RO
7012	ALID	54	4	N/A	N/A	N/A	N/A		Alarm ID	Discrete Variables	RO	RO	RO
7013	ALCD	10	1	N/A	N/A	N/A	N/A		Alarm Code	Discrete Variables	RO	RO	RO
7014	ALTX	20	n	N/A	N/A	N/A	N/A		Alarm Text	Discrete Variables	RO	RO	RO
7020	GEM_CEID	54	4	N/A	N/A	N/A	N/A		Latest CEID	Discrete Variables	RO	RO	RO
7402	TM_FULL_STR	20	n	N/A	N/A	N/A	N/A		Start at	Full Automation	RO	RO	RO
7403	TM_FULL_END	20	n	N/A	N/A	N/A	N/A		Estimated finish	Full Automation	RO	RO	RO
7406	X_CUR_SPEED	34	4	nm/sec	N/A	N/A	N/A		X axis speed	Full Automation	RO	RO	RO
7605	ALU_CH_NOW	20	3	N/A	N/A	N/A	N/A	"CH1" "CH2" "CH3" "CH4"	Channel No. of cutting	Full Automation	RO	RO	RO
7612	IS_FULLAUTO	54	4	N/A	N/A	N/A	N/A	1=Full automation 0=The others	Auto Mode	Full Automation	RO	RO	RO

2. Event List

Event (CEID) list

This section describes events that occur on the equipment.
The data length of an event (CEID) is always 4 bytes.

CEID	Enable/ Disable	Event Name	Comment
0	D	Reserved	
1	D	Cut Start	
2	D	Cut End	
3	D	PreCut Start	
4	D	PreCut End	
5	D	Alignment Start	
6	D	Alignment End	
7	D	Kerf Check Start	
8	D	Kerf Check End	
9	D	Clean Start	
10	D	Clean End	
11	D	SetUp Start	
12	D	SetUp End	
13	D	Blade Change Start	
14	D	Blade Change End	
15	D	Blade Dress Start	
16	D	Blade Dress End	
17-19	D	Reserved	
20	D	Wafer Load Start	Start to Wafer Load
21	D	Wafer Load End	A Wafer/Work has been loaded
22	D	Wafer Unload End	A Wafer/Work has been Unloaded
23	D	Wafer loading (Supply) Start	Start to Supply Works (Loader Restart)
24	D	Wafer loading (Supply) Stop	Stop/Pause to Supply works (Loader Stop)
25	D	System initialize Start	Press <SYS INI>
26	D	System initialize End	System has been initialized
27	D	New Cassette Set	System has been initialized
28-31	D	Reserved	
32	D	Wafer unload start	
33	D	Wafer to Clean Start	
34	D	Wafer to Clean End	
35	D	Mapping Start	
36	D	Mapping End	
37	D	CT Process Completed	
38-40	D	Reserved	
41	D	Full automation initialize start	<F1>:Single dicing device <F2>:Multi dicing device
42	D	Full automation initialize end	System was initialize for full automation
43	D	Full automation start	Press <START>
44	D	Full automation end	Cassettes have been processed
45	D	Full automation pause/stop	Press <STOP> while full automation is processing
46	D	Full automation restart	Press <START> while full automation is pause
47-70	D	Reserved	
71	D	Host message recognize	Operator recognized the arrived host message
72	D	Process program change	
73	D	Process program(s) selected	
74	D	OFF-LINE state transition	ON-LINE-> OFF-LINE

Event (CEID) list (Continued)

CEID	Enable/ Disable	Event Name	Comment
75	D	LOCAL substate transition	REMOTE -> LOCAL OFF-LINE -> ON-LINE/LOCAL
76	D	REMOTE substate transition	LOCAL -> REMOTE OFF-LINE -> ON-LINE/REMOTE
77	D	NEUTRAL state transition	Other state -> NEUTRAL
78	D	FULLAUTO state transition	Other state -> FULLAUTO Same timing as full automation start
79	D	MANUAL state transition	Other state -> MANUAL
80-120	D	Reserved	
121	D	Process program created	
122	D	Process program rename	
123	D	Process program deleted	
124-149	D	Reserved	
150	D	Process State Change	
151	D	FrameTransfer SubProcess State change	
152	D	CT SubProcess State Change	
153	D	ST SubProcess State Change	
154	D	ClnArm SubProcess State Change	
155-169	D	Reserved	
170	D	SpoolingActivated	
171	D	SpoolingDeactivated	
172	D	SpoolTransmitFailuer	
173-255	D	Reserved	
	D	Alarm set	CEID for Alarm set uses AlarmID + 0x10000000. "0x10000000" is used when making a setting with S2,F37 (common to all AlarmIDs).
	D	Alarm clear	CEID for Alarm set uses AlarmID + 0x10000000. "0x10000000" is used when making a setting with S2,F37 (common to all AlarmIDs).
	D	Limit Monitoring	CEID for Alarm set uses AlarmID + 0x10000000. "0x10000000" is used when making a setting with S2,F37 (common to all AlarmIDs).

3. Alarm List

Summary of this section

This section describes the alarms that occur in this machine.
The formats of the alarms may be changed in the future.

Alarm code (ALCD) definition

0	Other category
1	Safety (personnel)
2	Safety (equipment)
3	Parameter control warning
4	Parameter control error
5	Irrecoverable error
6	Equipment status warning
7	Attention flags
8	Data integrity
>8	Other category
9-63	Reserved

Alarm ID (ALID) format

ALID	Error No.	Alarm classification
24000+nnnn	Xnnnn	Axis
1000+nnnn	Annnn	Alignment
11000+nnnn	Knnnn	Kerf check
22000+nnnn	Vnnnn	Valve
18000+nnnn	Rnnnn	Loading arm
14000+nnnn	Nnnnn	Cassette
21000+nnnn	Unnnn	Utility (<i>e.g water</i>)
2000+nnnn	Bnnnn	Blade
15000+nnnn	Onnnn	Others
5000+nnnn	Ennnn	Emergency

nnnn : 0000 - 9999 ascii value.

Alarm List

ALID	ALT	ALT	ALCD
5000	E0000		6
5001	E0001	Turning power off.	6
5002	E0002	EM switch pressed.	6
5003	E0003	Insufficient main air.....Reinitialize.	6
5004	E0004	Spindle inverter error. Re-start the machine.	6
5005	E0005		6
5006	E0006		6
5007	E0007	UPS has been actuated.	6
5008	E0008	Z EM is activated.	6
5009	E0009	Initialize.	6
24010	X0010	Y-axis scale error.....Reinitialize.	6
5011	E0011	Spindle overheat error.	2
5012	E0012	Splash cover opened.	1
24013	X0013	X-axis servo error.....Turn power off.	5
5014	E0014	Temperature in the electrical box has increased.	2
5015	E0015	Water case overflow error.	2
5016	E0016	Drain tank overflow error.	2
5017	E0017	Cutting water flow error.	2
5018	E0018	Spindle cooling water flow error.	2
5019	E0019	Insufficient Clean air pressure.	2
5020	E0020	Handling cover sensor error.	1
5021	E0021	Elevator cover open error.	1
5022	E0022	Insufficient sub air.	2
2023	B0023	Spindle continuity error.	6
2024	B0024	Non-Contact setup check error.	6
2025	B0025	Calibrate sensor.	6
2026	B0026	Setup error (error detection.)	6
2027	B0027	Setup error (Z-axis position error.)	6
2028	B0028	Setup error (No detection.)	6
2029	B0029	Non-Contact setup reappearance error.	6
2030	B0030	Blade wear check error.	6
2031	B0031	Setup data error.	6
2032	B0032	At blade exposure limit. Replace the blade.	6
2033	B0033	At blade life limit. Replace the blade.	6
22034	V0034	Spindle error.	6
22035	V0035	Cut data is illegal.	4
5036	E0036	Cut area is out of order.	4
2037	B0037	B.B.D. blade detective error.	6
11038	K0038	Kerf check: Not found.	0
11039	K0039	Kerf check: Off center.	0
11040	K0040	Kerf check: Too wide.	0
11041	K0041	Kerf check: Too narrow.	0
11042	K0042	Kerf check: Chipping size.	0
11043	K0043	Kerf check: Chipping area.	0
11044	K0044	Kerf check: Target not found.	0
11045	K0045	Kerf check: Target position error.	0
11046	K0046	Kerf check: Too wide. (Center to Chipping)	0
11047	K0047	Kerf check: Too wide. (Include chipping)	0
11048	K0048	Could not find kerf center.	0
11049	K0049	Kerf center position error.	0
24050	X0050	X-axis unrecoverable error. Re-start the machine.	6
24051	X0051	X-axis unknown error.....Reinitialize.	6
24052	X0052	X-axis servo error. Re-start the machine.	6
24053	X0053	X-axis CW end error.....Reinitialize.	6

Alarm List (Continued)

ALID	ALTX	ALCD
24054	X0054 X-axis CCW end error.....Reinitialize.	6
24055	X0055 X-axis vibration error(near).....Reinitialize.	6
24056	X0056 X-axis vibration error(far).....Reinitialize.	6
24057	X0057 X-axis position error.....Reinitialize.	6
24058	X0058 X-axis scale retry error.....Reinitialize.	6
24059	X0059 X-axis parameter error.....Reinitialize.	6
24060	X0060 Y-axis unrecoverable error. Re-start the machine.	6
24061	X0061 Y-axis unknown error.....Reinitialize.	6
24062	X0062 Y-axis servo error. Re-start the machine.	6
24063	X0063 Y-axis CW end error.....Reinitialize.	6
24064	X0064 Y-axis CCW end error.....Reinitialize.	6
24065	X0065 Y-axis vibration error(near).	6
24066	X0066 Y-axis vibration error(far).	6
24067	X0067 Y-axis position error.....Reinitialize.	6
24068	X0068 Y-axis scale retry error.	6
24069	X0069 Y-axis parameter error.....Reinitialize.	6
24070	X0070 Z-axis unrecoverable error. Re-start the machine.	6
24071	X0071 Z-axis unknown error.....Reinitialize.	6
24072	X0072 Z-axis servo error. Re-start the machine.	6
24073	X0073 Z-axis CW end error.....Reinitialize.	6
24074	X0074 Z-axis CCW end error.....Reinitialize.	6
24075	X0075 Z-axis vibration error(near).....Reinitialize.	6
24076	X0076 Z-axis vibration error(far).....Reinitialize.	6
24077	X0077 Z-axis position error.....Reinitialize.	6
24078	X0078 Z-axis scale retry error.....Reinitialize.	6
24079	X0079 Z-axis parameter error.....Reinitialize.	6
24080	X0080 θ -axis unrecoverable error. Re-start the machine.	6
24081	X0081 θ -axis unknown error.....Reinitialize.	6
24082	X0082 θ -axis servo error. Re-start the machine.	6
24083	X0083 θ -axis CW end error.....Reinitialize.	6
24084	X0084 θ -axis CCW end error.....Reinitialize.	6
24085	X0085 θ -axis vibration error.	6
24086	X0086 θ -axis vibration error(far).....Reinitialize.	6
24087	X0087 θ -axis position error.....Reinitialize.	6
24088	X0088 θ -axis scale retry error.....Reinitialize.	6
24089	X0089 θ -axis parameter error.....Reinitialize.	6
24090	X0090 Rotary Arm-axis unrecoverable error. Re-start the machine.	6
24091	X0091 Rotary Arm-axis unknown error.	6
24092	X0092 Rotary Arm-axis servo error. Re-start the machine.	6
24093	X0093 Rotary Arm-axis CW end error.	6
24094	X0094 Rotary Arm-axis CCW end error.	6
24095	X0095 Rotary Arm-axis vibration error(near).	6
24096	X0096 Rotary Arm-axis vibration error(far).	6
24097	X0097 Rotary Arm-axis position error.	6
24098	X0098 Rotary Arm-axis scale retry error.	6
24099	X0099 Rotary Arm-axis parameter error.	6
24100	X0100 Spinner-axis unrecoverable error. Re-start the machine.	6
24101	X0101 Spinner-axis unknown error.	6
24102	X0102 Spinner-axis servo error. Re-start the machine.	6
24103	X0103 Spinner-axis CW end error.	6
24104	X0104 Spinner-axis CCW end error.	6
24105	X0105 Spinner-axis vibration error(near).	6
24106	X0106 Spinner-axis vibration error(far).	6

Alarm List (Continued)

ALID	ALTX		ALCD
24107	X0107	Spinner-axis position error.	6
24108	X0108	Spinner-axis scale retry error.	6
24109	X0109	Spinner-axis parameter error.	6
24110	X0110	Nozzle-axis unrecoverable error. Re-start the machine.	6
24111	X0111	Nozzle-axis unknown error.	6
24112	X0112	Nozzle-axis servo error. Re-start the machine.	6
24113	X0113	Nozzle-axis CW end error.	6
24114	X0114	Nozzle-axis CCW end error.	6
24115	X0115	Nozzle-axis vibration error(near).	6
24116	X0116	Nozzle-axis vibration error(far).	6
24117	X0117	Nozzle-axis position error.	6
24118	X0118	Nozzle-axis scale retry error.	6
24119	X0119	Nozzle-axis parameter error.	6
24120	X0120	Push pull-axis unrecoverable error. Re-start the machine.	6
24121	X0121	Push pull-axis unknown error.	6
24122	X0122	Push pull-axis servo error.	6
24123	X0123	Push pull-axis CW end error.	6
24124	X0124	Push pull-axis CCW end error.	6
24125	X0125	Push pull-axis vibration error(near).	6
24126	X0126	Push pull-axis vibration error(far).	6
24127	X0127	Push pull-axis position error.	6
24128	X0128	Push pull-axis scale retry error.	6
24129	X0129	Push pull-axis parameter error.	6
24130	X0130	Elevator-axis unrecoverable error. Re-start the machine.	6
24131	X0131	Elevator-axis unknown error.	6
24132	X0132	Elevator-axis servo error. Re-start the machine.	6
24133	X0133	Elevator-axis CW end error.	6
24134	X0134	Elevator-axis CCW end error.	6
24135	X0135	Elevator-axis vibration error(near).	6
24136	X0136	Elevator-axis vibration error(far).	6
24137	X0137	Elevator-axis position error.	6
24138	X0138	Elevator-axis scale retry error.	6
24139	X0139	Elevator-axis parameter error.	6
24140	X0140	Frame Centering-axis unrecoverable error. Re-start the machine.	6
24141	X0141	Frame Centering-axis unknown error.....Reinitialize.	6
24142	X0142	Frame Centering-axis servo error. Re-start the machine.	6
24143	X0143	Frame Centering-axis CW end error.....Reinitialize.	6
24144	X0144	Frame Centering-axis CCW end error.....Reinitialize.	6
24145	X0145	Frame Centering-axis vibration error(near).....Reinitialize.	6
24146	X0146	Frame Centering-axis vibration error(far).....Reinitialize.	6
24147	X0147	Frame Centering-axis position error.....Reinitialize.	6
24148	X0148	Frame Centering-axis scale retry error.....Reinitialize.	6
24149	X0149	Frame Centering-axis parameter error.....Reinitialize.	6
24150	X0150	Y2-axis unrecoverable error. Re-start the machine.	6
24151	X0151	Y2-axis unknown error.....Reinitialize.	6
24152	X0152	Y2-axis servo error. Re-start the machine.	6
24153	X0153	Y2-axis CW end error.....Reinitialize.	6
24154	X0154	Y2-axis CCW end error.....Reinitialize.	6
24155	X0155	Y2-axis vibration error(near).	6
24156	X0156	Y2-axis vibration error(far).	6
24157	X0157	Y2-axis position error.....Reinitialize.	6
24158	X0158	Y2-axis scale retry error.	6
24159	X0159	Y2-axis parameter error.....Reinitialize.	6
24160	X0160	Z2-axis unrecoverable error. Re-start the machine.	6

Alarm List (Continued)

ALID	ALTX		ALCD
24161	X0161	Z2-axis unknown error.....Reinitialize.	6
24162	X0162	Z2-axis servo error. Re-start the machine.	6
24163	X0163	Z2-axis CW end error.....Reinitialize.	6
24164	X0164	Z2-axis CCW end error.....Reinitialize.	6
24165	X0165	Z2-axis vibration error(near).....Reinitialize.	6
24166	X0166	Z2-axis vibration error(far).....Reinitialize.	6
24167	X0167	Z2-axis position error.....Reinitialize.	6
24168	X0168	Z2-axis scale retry error.....Reinitialize.	6
24169	X0169	Z2-axis parameter error.....Reinitialize.	6
5170	E0170	Wheel cover opened.	1
1171	A0171	θ -axis alignment exceed angle.	4
2172	B0172	Incorrect blade O.D.	6
2173	B0173	At blade life limit. Replace the blade.	6
5174	E0174	Micro scope cover open error.	6
5175	E0175	Process program error. re-initialize system.	6
5176	E0176	Cover open error.	6
5177	E0177	θ -axis reaches the set final position	6
2178	B0178	Replace the blade.	6
5179	E0179	X axis overheat error.	2
5180	E0180	θ axis overheat error.	2
5181	E0181	Temperature control Unit error.	2
2182	B0182	Execute contact setup.	6
2183	B0183	The blade abraded. Readjust the BBD sensor.	6
2184	B0184	B.B.D. blade detection error. (Partial blade breakage)	6
2185	B0185	B.B.D. blade detection error. (Total blade breakage)	6
22186	V0186	Unable to lock the cover.	6
5187	E0187	Cutting water flow error.(Blade)	2
5188	E0188	Cutting water flow error.(Shower)	2
22189	V0189	Spindle rpm error.	6
5190	E0190	Water leakage detected. (X axis)	6
5191	E0191	Internal communication error.	6
5192	E0192	Facility drain error.	6
22193	V0193	Workpiece vacuum error.	6
2500	B0500	B.B.D blade detection error. (Z1)	6
2501	B0501	B.B.D blade detection error. (Z2)	6
22502	V0502	No workpiece in cassette.	7
22503	V0503	Finger clamp error.	6
22504	V0504	Rotary Arm up error.	6
22505	V0505	Rotary Arm down error.	6
22506	V0506	Rotary Arm vacuum error.	6
22507	V0507	Linear Arm up error.	6
22508	V0508	Linear Arm down error.	6
22509	V0509	Linear Arm vacuum error.	6
22510	V0510	Linear Arm front end error.	6
22511	V0511	Linear Arm rear end error.	6
22512	V0512	Workpiece vacuum error.	6
22513	V0513	Spinner table vacuum error.	6
22514	V0514	Spinner table up error.	6
22515	V0515	Spinner table down error.	6
15516	O0516	Workpiece in cassette.	7
22517	V0517	Spindle rpm error.	6
15518	O0518	Cassette switch turned OFF.	6
15519	O0519	Remove the workpiece at frame centering guide.	7

Alarm List (Continued)

ALID	ALT		ALCD
15520	O0520	Remove the workpiece at C/T.	7
15521	O0521	Remove the workpiece at Rotary Arm.	7
15522	O0522	Remove the workpiece at S/T.	7
15523	O0523	Remove the workpiece at Linear Arm.	7
15524	O0524	No workpiece at frame centering. Press <Alarm/Clr> and remove it.	7
15525	O0525	Frame is slant.	7
22526	V0526	UV. Arm front end error.	6
22527	V0527	UV. Arm rear end error.	6
22528	V0528	UV. Arm up error.	6
22529	V0529	UV. Arm down error.	6
22530	V0530	UV. Arm vacuum error.	6
1531	A0531	Not found macro target.	9
1532	A0532	Not found micro target.	9
1533	A0533	Alignment time limit over.	9
1534	A0534	Not found index check target.	9
1535	A0535	Index check Y position error.(Y)	9
1536	A0536	Index check X position error.(X)	9
1537	A0537	Angle between channels error.	9
1538	A0538	Theta adjustment retry over.	9
1539	A0539	This work has been cut.	9
1540	A0540	Work size is wrong.	9
1541	A0541	ANGLE : Slice level error.	9
1542	A0542	ANGLE : Chip number is not enough.	9
1543	A0543	ANGLE : Retry over.	9
1544	A0544	Index check Y position error.(Y)	9
1545	A0545	Least square approximation θ adjust limit error.	9
1546	A0546	Alignment.	9
1547	A0547	FORM : Slice level error	9
1548	A0548	Alignment.	9
1549	A0549	Alignment.	9
1550	A0550	Alingment.	9
1551	A0551	The work thickness is different from the data.	4
1552	A0552	Focus maintenance has not been done.	7
5553	E0553	Insufficient main air of work changer.	2
5554	E0554	Z1-axis cutting water flow error.	6
5555	E0555	Z2-axis cutting water flow error.	6
5556	E0556	Z1-axis spindle cooling water flow error.	6
5557	E0557	Z2-axis spindle cooling water flow error.	6
5558	E0558	Z1-axis spindle inverter error. Re-start the machine.	6
5559	E0559	Z2-axis spindle inverter error. Re-start the machine.	6
5560	E0560	Z1-axis spindle overheat error.	6
5561	E0561	Z2-axis spindle overheat error.	6
2562	B0562	Z1-axis at blade exposure limit.	6
2563	B0563	Z2-axis at blade exposure limit.	6
2564	B0564	Z1-axis at blade life limit.	6
2565	B0565	Z2-axis at blade life limit.	6
5566	E0566	Blade cooling water error.	2
5567	E0567	Wafer washing water error.	2
22568	V0568	S/T resistivity error.	2
22569	V0569	C/T resistivity error.	2
22570	V0570	Pressure of S/T high pressure water dropped.	2
5571	E0571	Z1-axis at blade cooling water error.	2
5572	E0572	Z1-axis at wafer washing water error.	2
5573	E0573	Z2-axis at blade cooling water error.	2

Alarm List (Continued)

ALID	ALTX	ALCD
5574	E0574 Z2-axis at wafer washing water error.	2
5575	E0575 S/T rins flow error.	6
5576	E0576 Pressure of water dropped.	2
5577	E0577 The shutter is not closed.	6
5578	E0578 ABC Inner cover doesn't closed.	6
5579	E0579 ABC Inner cover doesn't open.	6
15580	O0580 Bar code read error.	6
22581	V0581 Equipment state management system is running.	6
2582	B0582 Z1-axis calibrate sensor.	6
2583	B0583 Z1-axis setup error (error detection.)	6
2584	B0584 Z1-axis setup error (Z-axis position error.)	6
2585	B0585 Z1-axis setup error (No detection.)	6
2586	B0586 Z1-axis non-contact setup reappearance error.	6
2587	B0587 Z1-axis blade wear check error.	6
2588	B0588 Z1-axis setup data error.	6
2589	B0589 Z2-axis calibrate sensor.	6
2590	B0590 Z2-axis setup error (error detection.)	6
2591	B0591 Z2-axis setup error (Z-axis position error.)	6
2592	B0592 Z2-axis setup error (No detection.)	6
2593	B0593 Z2-axis non-contact setup reappearance error.	6
2594	B0594 Z2-axis blade wear check error.	6
2595	B0595 Z2-axis setup data error.	6
1596	A0596 Street adjust data error. Please reteach.	9
5597	E0597 ABC can't catch the nut.	6
5598	E0598 ABC Don't catch blade.	6
5599	E0599 ABC Outlet Cylinder don't work.	6
5600	E0600 ABC Outlet Cylinder don't back.	6
5601	E0601 ABC Supply Cylinder don't work.	6
5602	E0602 ABC Supply Cylinder don't back.	6
5603	E0603 ABC Can't Remove Blade.	6
5604	E0604 ABC Blade Stocker is Empty.	6
5605	E0605 ABC rot Nut Timeout.	6
5606	E0606 ABC Supply Stocker is Empty.(NEW Blade)	6
5607	E0607 ABC don't Set Nut.	6
15608	O0608 Error occurs in barcode data communication.	6
15609	O0609 Can not find device number corresponding barcode data.	6
22610	V0610 C/T clamp error.	6
22611	V0611 Remove C/T work and re-initialize in full auto mode.	6
22612	V0612 Remove C/T work and re-initialize system.	6
22613	V0613 Rotation table vacuum error.	6
22614	V0614 Can not find orientation flat.	6
22615	V0615 Error occurs in UV lamp.	6
22616	V0616 Rotation table down error.	6
22617	V0617 Frame centering error.	6
22618	V0618 Pressure of high pressure cutting water dropped.	6
22619	V0619 Pressure of high pressure cutting water risen.	6
24620	X0620 Turn table axis unrecoverable error. Re-start the machine.	6
24621	X0621 Turn table axis unknown error.	6
24622	X0622 Turn table axis servo error. Re-start the machine.	6
22623	V0623 Frame centering error.	6
22624	V0624 Pressure of S/T high pressure water risen.	2
5625	E0625 Abnormal condition during cassette transferring.	6
22626	V0626 Loader Cassete Centering Up Error.	6
22627	V0627 Loader Cassete Centering Down Error.	6

Alarm List (Continued)

ALID	ALT	ALT	ALCD
22628	V0628	Cassete Positioning Notch Up Error.	6
22629	V0629	Cassete Positioning Notch Down Error.	6
22630	V0630	The maintenance cover is not closed.	6
22631	V0631	Linear arm vacuum error. Set the workpiece at S/T.	6
1632	A0632	X axis stroke is too big. Set the θ adjust stroke bigger.	9
15633	O0633	Unprocessed workpiece is left in the cassette.	6
15634	O0634	Cassette carrying in and out time out.	6
15635	O0635	Device data cannot be found of the carried in cassette.	6
15636	O0636	Take out the upper cassette.	6
15637	O0637	Take out the lower cassette.	6
15638	O0638	The device data cannot be found.	6
15639	O0639	The blade width does not consistent with the data.	6
11640	K0640	Die check: Not found.	0
11641	K0641	Die check: Off center.	0
11642	K0642	Die check: Too wide.	0
11643	K0643	Die check: Too narrow.	0
11644	K0644	Die check: Chipping size.	0
11645	K0645	Die check: Chipping area.	0
11646	K0646	Die check: Target not found.	0
11647	K0647	Die check: Target position error.	0
11648	K0648	Die check: Too wide. (Include chipping)	0
15649	O0649	Dress board life limit.	6
15650	O0650	Communication timeout error.	6
5651	E0651	Spindle overcurrent error.	6
5652	E0652	Water is leaking.	6
5653	E0653	No precut workpiece.	6
5654	E0654	No precut area left. Press ALRMCLR to cancel full-auto operation.	6
5655	E0655	Work Positioning Error.	6
5656	E0656	Start interlock in operation.	6
15657	O0657	An abnormal barcode data.	6
22658	V0658	Frame stopper is not opened.	6
22659	V0659	Frame stopper is not closed.	6
2660	B0660	Blade detection error. (Z1 partial blade breakage)	6
2661	B0661	Blade detection error. (Z1 total blade breakage)	6
2662	B0662	Blade detection error. (Z2 partial blade breakage)	6
2663	B0663	Blade detection error. (Z2 total blade breakage)	6
5664	E0664	Water leakage detected. (Drain tank)	6
5665	E0665	Water leakage detected. (Spinner)	6
15666	O0666	Blade type is wrong and identify device data	6
5667	E0667	Z1-axis at blade cooling water error (Front).	2
5668	E0668	Z1-axis at blade cooling water error (Rear).	2
5669	E0669	Z2-axis at blade cooling water error (Front).	2
5670	E0670	Z2-axis at blade cooling water error (Rear).	2
1671	A0671	Height correction by focusing is too large.	2
5672	E0672	Non-contact setup water flow error.	2
22673	V0673	Multi point setup reappearance error.	6
11674	K0674	Z-AXIS correction value exceeds the limit.(over $\pm 50 \mu\text{m}$)	6
15675	O0675	Blade type is same and identify device data	6
2676	B0676	BLADE WEAR AMOUNT ERROR (Z1)	6
2677	B0677	BLADE WEAR AMOUNT ERROR (Z2)	6
15678	O0678	Remove the workpiece at inspection stage.	7
5679	E0679	Spindle revolution upper limit (rpm)	8
5680	E0680	Z1 spindle revolution upper limit (rpm)	8
5681	E0681	Z2 spindle revolution upper limit (rpm)	8

Alarm List (Continued)

ALID	ALTX		ALCD
5682	E0682	Spindle revolution lower limit (rpm)	8
5683	E0683	Z1 spindle revolution lower limit (rpm)	8
5684	E0684	Z2 spindle revolution lower limit (rpm)	8
5685	E0685	Spindle load current upper limit (mA)	8
5686	E0686	Z1 spindle load current upper limit (mA)	8
5687	E0687	Z2 spindle load current upper limit (mA)	8
5688	E0688	Spindle load current lower limit (mA)	8
5689	E0689	Z1 spindle load current lower limit (mA)	8
5690	E0690	Z2 spindle load current lower limit (mA)	8
5691	E0691	X axis feed speed upper limit error ()	8
5692	E0692	X axis feed speed lower limit error ()	8
5693	E0693	Cut water flow (BLD F) upper limit	8
5694	E0694	Z1 cut water flow(BLD F) upper limit	8
5695	E0695	Z2 cut water flow(BLD F) upper limit	8
5696	E0696	Cut water flow (BLD R) upper limit	8
5697	E0697	Z1 cut water flow(BLD R) upper limit	8
5698	E0698	Z2 cut water flow(BLD R) upper limit	8
5699	E0699	Cut water flow (SHW) upper limit	8
5700	E0700	Z1 cut water flow (SHW) upper limit	8
5701	E0701	Z2 cut water flow (SHW) upper limit	8
5702	E0702	Cut water flow (SP) upper limit	8
5703	E0703	Z1 cut water flow (SP) upper limit	8
5704	E0704	Z2 cut water flow (SP) upper limit	8
5705	E0705	Cut water flow (BLD F) lower limit	8
5706	E0706	Z1 cut water flow(BLD F) lower limit	8
5707	E0707	Z2 cut water flow(BLD F) lower limit	8
5708	E0708	Cut water flow (BLD R) lower limit	8
5709	E0709	Z1 cut water flow(BLD R) lower limit	8
5710	E0710	Z2 cut water flow(BLD R) lower limit	8
5711	E0711	Cut water flow (SHW) lower limit	8
5712	E0712	Z1 cut water flow (SHW) lower limit	8
5713	E0713	Z2 cut water flow (SHW) lower limit	8
5714	E0714	Cut water flow (SP) lower limit	8
5715	E0715	Z1 cut water flow (SP) lower limit	8
5716	E0716	Z2 cut water flow (SP) lower limit	8
5717	E0717	Resistivity Upper Limit Error. (MΩcm)	8
5718	E0718	Resistivity Lower Limit Error. (MΩcm)	8
5719	E0719	Cleaning Water Pressure Upper Limit.(MPa)	8
5720	E0720	Cleaning Water Pressure Lower Limit.(MPa)	8
5721	E0721	Cleaning Water Res. Upper Limit. (MΩcm)	8
5722	E0722	Cleaning Water Res. Lower Limit. (MΩcm)	8
5723	E0723		8
5724	E0724		8
5725	E0725		8
2726	B0726	BBD Transparency Level is Abnormal. Please recheck Blade.	6
11727	K0727	Kerf check: θ GAP error.	0
5728	E0728	Z1-axis cutting water flow error. (blade cooler : front)	2
5729	E0729	Z1-axis cutting water flow error. (blade cooler : rear)	2
5730	E0730	Z1-axis cutting water flow error. (spray)	2
5731	E0731	Z1-axis cutting water flow error. (shower)	2
5732	E0732	Z2-axis cutting water flow error. (blade cooler : front)	2
5733	E0733	Z2-axis cutting water flow error. (blade cooler : rear)	2
5734	E0734	Z2-axis cutting water flow error. (spray)	2
5735	E0735	Z2-axis cutting water flow error. (shower)	2

Alarm List (Continued)

ALID	ALT	ALT	ALCD
5736	E0736	N2 is abnormal of UV lightion system.	6
5737	E0737	Pressure of lubricating oil pump is abnormal.	6
5738	E0738	There is not lubricating oil.	6
5739	E0739	Refuel less than 16 percent lubricating oil.	6
5740	E0740	Lubricating oil does not spread identify it.	6
5741	E0741	Pressure of lubricating oil is abnormal.(X-AXIS)	6
5742	E0742	Facility drain error.	6
5743	E0743	Mist Seperator Abnormality.	6
5744	E0744	AE SENSOR setup reappearance error.	6
5745	E0745	A/E sensor disconnected.	6
5746	E0746	No response A/E sensor.	6
5747	E0747	No dress board workpiece.	6
5748	E0748	No dress area left. Press ALRMCLR to cancel full-auto operation.	6
22749	V0749	Exceed UV lamp usage life.	6
22750	V0750	Workpiece vacuum error.(ZONE1)	6
22751	V0751	Workpiece vacuum error.(ZONE2)	6
22752	V0752	Workpiece vacuum error.(ZONE3)	6
22753	V0753	Workpiece vacuum error.(ZONE4)	6
22754	V0754	Water is not called off to vacuum pump.	6
22755	V0755	Vacuum pump does not work.	6
22756	V0756	Pressure of vacuum pump is abnormal.	6
5757	E0757	Breaker down. Please restart the machine.	6
1758	A0758	Set Position Parameter is Incorrect. Enter Number from 1 to 3.	6
5759	E0759	Area sensor detection error.	6
5760	E0760	Duct unit is abnormal.	6
5761	E0761	Water leakage detected.(Drain Pan)	6
5762	E0762	Duct unit doesn't change.	6
5763	E0763	Wash brush up error.	6
5764	E0764	Wash brush down error.	6
2765	B0765	Z1 axis Blade type is wrong and identify device data	6
2766	B0766	Z2 axis Blade type is wrong and identify device data	6
5767	E0767	Please put back the lower cassette.	6
5768	E0768	Z1-axis at cutting water error. (blade)	2
5769	E0769	Z1-axis at cutting water error. (spray front)	2
5770	E0770	Z1-axis at cutting water error. (spray rear)	2
5771	E0771	Z2-axis at cutting water error. (blade)	2
5772	E0772	Z2-axis at cutting water error. (spray front)	2
5773	E0773	Z2-axis at cutting water error. (spray rear)	2
5774	E0774	Fan motor stopped.	2
5775	E0775	Rotary Arm stretch error.	2
5776	E0776	Rotary Arm fold error.	2
5777	E0777	Ultrasonic generater error	2
5778	E0778	Water for Ultrasonic generater error	2
5779	E0779	Ioniser is powered OFF. (Rotary Arm)	6
5780	E0780	Ioniser is powered OFF. (Unload Arm)	6
5781	E0781	Picker/Loader Section Cover Open.	6
5782	E0782	Material Handler Arm(SV95) Is not detected by Right Sensor.	6
5783	E0783	Material Handler Arm(SV95) Is not detected by Left Sensor.	6
5784	E0784	Pusher Arm 1(SV96) Is not detected by Right Sensor.	6
5785	E0785	Pusher Arm 1(SV96) Is not detected by Left Sensor.	6
5786	E0786	Pusher Arm 2(SV97) Is not detected by Right Sensor.	6
5787	E0787	Pusher Arm 2(SV97) Is not detected by Left Sensor.	6
5788	E0788	Couldn't load work correctly at Picker Side.	6

Alarm List (Continued)

ALID	ALTX		ALCD
5789	E0789	Picker is powered off.	6
5790	E0790	Picker powered off during handling.	6
5791	E0791	There is work at Material Handler Stage.	6
5792	E0792	Cannot full auto initial	6
5793	E0793	Cannot full auto start	6
22794	V0794	Jig vacuum error.	6
5795	E0795	The chucking stage cover is open	6
15796	O0796	Serial communication error	6
5797	E0797	Spindle load current error.(HI)	6
5798	E0798	Spindle load current error.(LO)	6
1799	A0799	Alignment position data is incomplete (X-Initial Postion) .	9
1800	A0800	Alignment position data is incomplete (Y-Initial Postion)	9
1801	A0801	Y correction limit error. (Line no.)	9
1802	A0802	θ correction limit error. (Line no.)	9
15803	O0803	Special cutting sequence requires special alignment sequence.	4
2804	B0804	Z1 Axis Setup Position is abnormal.	6
2805	B0805	Z2 Axis Setup Position is abnormal.	6
22806	V0806	Workpiece vacuum error.	6
22807	V0807	Workpiece vacuum error.	6
5808	E0808	Pure Water Resistivity Lower Limit Error.	8
5809	E0809	Carbonated Water Resistivity Lower Limiet Error.	8
5810	E0810	Cleaning Water Pressure Lower Limit Error.	8
5811	E0811	Cleaning Water Pressure Upper Limit Error.	8
25000	X1000	Microscope-axis unrecoverable error. Restart the machine.	6
25001	X1001	Microscope-axis unknown error.....Reinitialize.	6
25002	X1002	Microscope-axis servo error. Restart the machine.	6
25003	X1003	Microscope-axis CW end error.....Reinitialize.	6
25004	X1004	Microscope-axis CCW end error.....Reinitialize.	6
25005	X1005	Microscope-axis vibration error(near).....Reinitialize.	6
25006	X1006	Microscope-axis vibration error(far).....Reinitialize.	6
25007	X1007	Microscope-axis position error.....Reinitialize.	6
25008	X1008	Microscope-axis scale retry error.....Reinitialize.	6
25009	X1009	Microscope-axis parameter error.....Reinitialize.	6
23010	V1010	W/T Sensor Error. (OPEN Position)	6
23011	V1011	W/T Sensor Error. (LOADING Position)	6
23012	V1012	W/T Sensor Error. (CENTERING Position)	6
23013	V1013		6
23014	V1014	Up Error (Lower arm Upper cylinder)	6
23015	V1015	Down Error (Lower arm Upper cylinder)	6
23016	V1016	Up Error (Lower arm Lower cylinder)	6
23017	V1017	Down Error (Lower arm Lower cylinder)	6
23018	V1018	Upper Arm front end error.	6
23019	V1019	Upper Arm rear end error.	6
23020	V1020	Upper Arm up error.	6
23021	V1021	Upper Arm down error.	6
23022	V1022	Lower Arm front end error.	6
23023	V1023	Lower Arm rear end error.	6
23024	V1024	Upper Arm vacuum error.	6
23025	V1025	Lower Arm vacuum error.	6
16026	O1026		6
6027	E1027	Cassete Position Error (Placement)	6
16028	O1028	Remove the workpiece at Upper Arm.	7
16029	O1029	Remove the workpiece at Lower Arm.	7

Alarm List (Continued)

ALID	ALT	ALT	ALCD
6030	E1030	PGV arm detection error.	7
6031	E1031	Surfactant flow error	7
6032	E1032	Inspection cover sensor error.	1
6033	E1033	Water leakage detected. (θ axis)	6
6034	E1034	Clean air Pressure of S/T cleaning water dropped.	6
6035	E1035	Water flow of S/T cleaning water dropped.	6
16036	O1036	Inspection cassette switch turned OFF.	6
23037	V1037	Remove the workpiece at UV Stage.	6
23038	V1038	UV Glass plate close error.	6
23039	V1039	UV Glass plate open error.	6
23040	V1040	Finger clamp up end error.	6
23041	V1041	Finger clamp down end error.	6
16042	O1042	Can not find device number corresponding PPID.	6
23043	V1043	NCS Cover open error.	6
23044	V1044	NCS Cover close error.	6
6045	E1045	Water leakage detected. (Drain tank or drain pan)	6
23046	V1046	Wheel Cover open error.	6
23047	V1047	Wheel Cover close error.	6
16048	O1048	Ionizer error was detected.	6
16049	O1049		6
16050	O1050	Workpiece thickness measurement result is out of range.	6
16051	O1051	No Workpiece Thickness Measurement Position item is selected.	6
16052	O1052	NSD Maintenance is not performed.	6
23053	V1053	Robot Pick Vacuum Error (during Loading)	6
23054	V1054	Robot Pick Vacuum Error (during Unloading)	6
3055	B1055	Sub C/T Silicon Calibration Chip life end. Replace and retry CCS.	6
3056	B1056	No Silicon Calibration Chip on Sub Chuck Table.	6
3057	B1057	Chopper Cut Setup data is abnormal.	6
3058	B1058	Z1 axis Chopper Cut Setup data is abnormal.	6
3059	B1059	Z2 axis Chopper Cut Setup data is abnormal.	6
16060	O1060	Workpiece Thickness Measurement Position Data is invalid.	6
23061	V1061	Lower arm vacuum error. (during Loading)	6
23062	V1062	Lower arm vacuum error. (during Unloading)	6
23063	V1063		6
23064	V1064		6
23065	V1065		6
3066	B1066		6
23067	V1067		6
23068	V1068		6
23069	V1069	Positioning Table vacuum error.	6
16070	O1070	Workpiece surface position is abnormal.	6
16071	O1071	NSD Workpiece Thickness Measurement position is not specified.	6
16072	O1072	Release the workpiece on the Robot Pick.	6
16073	O1073	NSD Supply air pressure error.	6
16074	O1074		6
3075	B1075	Z1Z2 axis Chopper Cut Setup data is abnormal.	6
3076	B1076	Illegal Position (Tape hairline)	6
23077	V1077		6
16078	O1078	Please set the cassette to the correct position.	6
2079	A1079	CUTTING DEPTH is abnormal.	6
23080	V1080	Robot Pick Vacuum Error (in cassette)	6
16081	O1081	FOUP opener : Communication timeout error.	6
16082	O1082	FOUP opener : Data receiving is failed.	6
16083	O1083	FOUP opener : It is interlock error generating. (code=)	6

Alarm List (Continued)

ALID	ALTX		ALCD
16084	O1084	Clean brush up error.	6
16085	O1085	Clean brush down error.	6
16086	O1086	FOUP opener : The error occurred. (code=)	6
16087	O1087	FOUP opener : Unrecoverable error. Restart the machine.(code=)	6
16088	O1088	FOUP opener : protocol error.	6
16089	O1089	FOUP opener : Reply code error. (code=)	6
25090	X1090	Robot Pick-axis unrecoverable error. Restart the machine.	6
25091	X1091	Robot Pick-axis unknown error.	6
25092	X1092	Robot Pick-axis servo error. Restart the machine.	6
25093	X1093	Robot Pick-axis CW end error.	6
25094	X1094	Robot Pick-axis CCW end error.	6
25095	X1095	Robot Pick-axis vibration error(near).	6
25096	X1096	Robot Pick-axis vibration error(far).	6
25097	X1097	Robot Pick-axis position error.	6
25098	X1098	Robot Pick-axis scale retry error.	6
25099	X1099	Robot Pick-axis parameter error.	6
25100	X1100	Positioning table-axis unrecoverable error. Restart the machine.	6
25101	X1101	Positioning table-axis unknown error.	6
25102	X1102	Positioning table-axis servo error. Restart the machine.	6
16103	O1103		6
16104	O1104		6
16105	O1105		6
16106	O1106		6
16107	O1107		6
16108	O1108		6
16109	O1109		6
16110	O1110		6
16111	O1111		6
16112	O1112	FOUP Opener :Mapping result is abnormal.	6
16113	O1113	Cassette lock can't be on.	6
16114	O1114	Cassette unlock can't be off.	6
16115	O1115	Wafer ID recognition error.	6
16116	O1116	Wafer ID reader communication error.	6
2117	A1117	BLADE HEIGHT is abnormal.	6
16118	O1118	The cassette no. can't be used.	6
16119	O1119	CUTTING DEPTH is greater than work thickness.	6
16120	O1120	NSD deviation tolerance error.	6
16121	O1121	NSD valve up error.....Reinitialize.	6
16122	O1122	NSD valve down error.	6
16123	O1123	NSD paramater error.	6
6124	E1124	Can't Open S/T Cover.	6
6125	E1125	Can't Close S/T Cover.	6
16126	O1126	FOUP :Initial is failed.	6
16127	O1127	Remove the workpiece at P/T.	7
16128	O1128	FOUP : Mapping paramater error.	6
12129	K1129	CCSetup : Kerf is not center position.	6
23130	V1130	Robot Pick Vacuum Error.	6
16131	O1131	Popped out workpiece detected in elevator section.	6
6132	E1132	Kerf cannot be found.	8
3133	B1133	Non-Contact setup check error.(Z1)	6
3134	B1134	Non-Contact setup check error.(Z2)	6
6135	E1135	Cut section rear cover opened.	1
16136	O1136	Wafer ID recognition error.(Surface)	6
16137	O1137	Wafer ID recognition error.(Back)	6

Alarm List (Continued)

ALID	ALTX		ALCD
16138	O1138	Wafer ID reader A recipe name is inaccurate.	6
16139	O1139	Reception went wrong from the wafer ID reader.	6
16140	O1140	Wafer ID reader has not moved to a predetermined position.	6
16141	O1141	Host command receive timeout error. (T3)	6
16142	O1142	The cassette lot number is not set up.	6
16143	O1143	Cassette ID read failed.	6
6144	E1144	Please remove a cassette. (It was refused by the host)	6
6145	E1145	It changed into the state where a remote command is unreceivable.	6
6146	E1146	The reception error of a remote command occurred.	6
6147	E1147	The resistivity value is abnormal.	6
16148	O1148		6
23149	V1149	Up Error (Upper arm Upper cylinder)	6
23150	V1150	Down Error (Upper arm Upper cylinder)	6
23151	V1151	Up Error (Upper arm Lower cylinder)	6
23152	V1152	Down Error (Upper arm Lower cylinder)	6
23153	V1153	Upper Arm right end error.	6
23154	V1154	Upper Arm left end error.	6
23155	V1155	Lower Arm up error.	6
23156	V1156	Lower Arm down error.	6
23157	V1157	Shutter open error.	6
23158	V1158	Shutter close error.	6
16159	O1159		6
16160	O1160		6
16161	O1161		6
16162	O1162	Y-axis reached a movement limit. Please confirm device data.	6
2163	A1163	Abnormal device data. Please confirm device data and reteach.	6
2164	A1164	Y axes will get near too much.	6
6165	E1165	Remnant disposal box is open.	6
6166	E1166	Remnant disposal flow sensor error.	6
6167	E1167	Please empty the remnant box.	6
6168	E1168	Vacuum tank is full. Release C/T vacuum to drain.	6
6169	E1169	Vacuum tank water level is not reached low sensor.	6
6170	E1170	WARNING! Vacuum tank water level is reached hi sensor.	6
2171	A1171	Alignment position of work piece and jig table is off over the limit.	6
6172	E1172	Temperature of a vacuum pump is unusual.	6
6173	E1173	A vacuum pump is an over-current.	6
6174	E1174	Slide cover opened.	6
16175	O1175	The external transfer arm is located on the chuck table.	6
16176	O1176	A wafer has not been adsorbed with a Bernoulli pad.(6
6177	E1177	A remnant box belt conveyer is in an alarm state.	6
12178	K1178	Work disp check: Workpiece displacement of θ is abnormal.	6
16179	O1179	Bernoulli pad : A nail was not opened.	6
6180	E1180	Water leakage detected. (Spinner or Drain pan)	6
6181	E1181	S/T Over Flow	6
23182	V1182	Workpiece vacuum error. (Remnant)	6
6183	E1183	CO2 bubbler error	6
6184	E1184	CO2 bubbler power off	6
23185	V1185	Water is not called off to vacuum pump.(for Duct)	6
23186	V1186	Vacuum pump does not work.(for Duct)	6
23187	V1187	Pressure of vacuum pump is abnormal.(for Duct)	6
12188	K1188	Work disp check: Workpiece displacement of Y is abnormal.	6
16189	O1189	UV Irradiation Stamp Arm up error.	6
16190	O1190	UV Irradiation Stamp Arm down error.	6
6191	E1191	Temperature compensation limit error.	6

Alarm List (Continued)

ALID	ALT	ALT	ALCD
16192	O1192	UV irradiance limit error.	6
16193	O1193	Upper Arm clamp error.	6
23194	V1194	Workpiece vacuum off error.	6
16195	O1195	C/T Table set error.	6
23196	V1196	Spinner table vacuum off error.	6
6197	E1197	Handling cover(Rear) sensor error.	1
6198	E1198	Water leakage detected. (High Pressure Pump)	6
16199	O1199	Z2 microscope function is disabled.	6
16200	O1200	Z2 microscope can not use with present alignment pattern.	6
6201	E1201	Handling Slide cover sensor error.	1
6202	E1202	The wafer appearance sensor of a robot pick is unusual.	1
6203	E1203	Wheel cover opened(Z1).	1
6204	E1204	Wheel cover opened(Z2).	1
16205	O1205	Workpiece on C/T. Continue only when cut is completely finished.	6
6206	E1206	Interlock circuit is abnormal.Please restart the machine.	1
6207	E1207	Z1-axis blade is broken. DUAL cut uses only Z2-axis.	1
6208	E1208	Z2-axis blade is broken. DUAL cut uses only Z1-axis.	1
6209	E1209		1
25210	X1210	RotaryStage-axis unrecoverable error. Restart the machine.	6
25211	X1211	RotaryStage-axis unknown error.....Reinitialize.	6
25212	X1212	RotaryStage-axis servo error. Restart the machine.	6
25213	X1213	RotaryStage-axis CW end error.....Reinitialize.	6
25214	X1214	RotaryStage-axis CCW end error.....Reinitialize.	6
25215	X1215	RotaryStage-axis vibration error(near).....Reinitialize.	6
25216	X1216	RotaryStage-axis vibration error(far).....Reinitialize.	6
25217	X1217	RotaryStage-axis position error.....Reinitialize.	6
25218	X1218	RotaryStage-axis scale retry error.....Reinitialize.	6
25219	X1219	RotaryStage-axis parameter error.....Reinitialize.	6
6220	E1220	Temperature lower limit.	6
6221	E1221	Temperature upper limit.	6
23222	V1222	Cut water flow (Z1 BLD F) overcurrent	6
23223	V1223	Cut water flow (Z1 BLD R) overcurrent	6
23224	V1224	Cut water flow (Z1 SHW) overcurrent	6
23225	V1225	Cut water flow (Z1 SP) overcurrent	6
23226	V1226	Cut water flow (Z2 BLD F) overcurrent	6
23227	V1227	Cut water flow (Z2 BLD R) overcurrent	6
23228	V1228	Cut water flow (Z2 SHW) overcurrent	6
23229	V1229	Cut water flow (Z2 SP) overcurrent	6
16230	O1230	It reached at UV irradiation maximum time period.	6
16231	O1231	It reached at UV Total Time.	6
16232	O1232		6
6233	E1233	Water leakage detected. (chiller)	6
6234	E1234	Elevator sensor detected an obstacle.	7
16235	O1235	Please perform a dress.	7
16236	O1236		6
6237	E1237	Splash prevention shutter open error	6
6238	E1238	Splash prevention shutter close error	6
16239	O1239	Handling EM signal ON.	6
23240	V1240	Can't Close Wheel Cover(Z1).	6
23241	V1241	Can't Close Wheel Cover(Z2).	6
23242	V1242	Can't Close Lens Shutter.	6
23243	V1243	Can't Open Lens Shutter.	6
23244	V1244	Can't Open Wheel Cover(Z1).	6
23245	V1245	Can't Open Wheel Cover(Z2).	6

Alarm List (Continued)

ALID	ALT	ALT	ALCD
16246	O1246		6
16247	O1247		6
16248	O1248		6
16249	O1249		6
16250	O1250		6
16251	O1251		6
6252	E1252	Setup data is abnormal. Please non-contact setup.	6
6253	E1253	Setup data is abnormal. Please contact setup.	6
6254	E1254	Setup data is abnormal. Please Chopper cut setup.	6
16255	O1255		6
16256	O1256	Data is inaccurate.	6
16257	O1257	Loading to P/T went wrong. Please check a state.	6
16258	O1258		6
6259	E1259	NSD voltage is unusual. (Before NSD air supply)	6
6260	E1260	NSD voltage is unusual. (After NSD air supply)	6
6261	E1261	The nozzle contacted during NSD execution.	6
6262	E1262	A robot pick has not been recognized. (half-cut is chosen)	6
6263	E1263	A clamp has not been recognized. (full-cut is chosen)	6
6264	E1264	The orifla sensor of the C/T size chosen has not been recognized.	6
16265	O1265	Remove workpiece from frame centering. Press <System initial> again.	6
16266	O1266	It is outside dress area.	6
23267	V1267	Upper arm vacuum error. Press <Alarm/Clr> and remove workpiece.	6
23268	V1268	Lower arm vacuum error. Press <Alarm/Clr> and remove workpiece.	6
2269	A1269	Edge was not found.	6
2270	A1270	Workpiece displacement offset error.	6
2271	A1271	Position rel of edge is abnormal. Displacement can not be calculated.	6
2272	A1272	The work thickness is thicker.	4
2273	A1273	The work thickness is thinner.	4
6274	E1274	CO2Injector error. ()	6
23275	V1275	C/T vacuum error.	6
16276	O1276	Communication status is unusual.	6
6277	E1277	Dress Time has Been Reached. Press START/STOP to restart Operation.	6
6278	E1278	Scheduled Dress Time has been reached.	6
6279	E1279	Water resistivity upper limit error.	6
6280	E1280	Water resistivity lower limit error.	6
6281	E1281	Z-axis autodown corection limit error.	6
23282	V1282	Spinner table JIG vacuum error.	6
6283	E1283	Ball position detect error occuerd of handler. Cutting stopped.	6
6284	E1284	Slide cover is opened. Spinner Stopped.	6
16285	O1285	Hair line limit over.(once)	6
16286	O1286	Hair line limit over.(total)	6
6287	E1287	Handler arm is in process or error.	6
16288	O1288	Workpiece on chuck table is unprocessed.	6
6289	E1289	Overflow happened in spinner.	6
16290	O1290	Workpiece on C/T.	6
12291	K1291	Off center adjust correction over (KERF CHECK)	6
12292	K1292	Z-AXIS correction value exceeds the limit.	6
16293	O1293	Remove workpiece between cassette and frame centering.	6
16294	O1294	Foup cover sensor error.	6
16295	O1295	No jig at S/T.	6
16296	O1296	The external transfer arm is located on the S/T.	6
16297	O1297	EM switch pressed by Handler.	6
3298	B1298	At dress timing (Z1). Perform dressing.	6
3299	B1299	At dress timing (Z2). Perform dressing.	6

Alarm List (Continued)

ALID	ALTX		ALCD
3300	B1300	Please replace dresser board of Y1 side.	6
3301	B1301	Please replace dresser board of Y2 side.	6
3302	B1302	Please replace dresser boards of both sides.	6
23303	V1303	Dress Table vacuum error. (Y1 side)	6
23304	V1304	Dress Table vacuum error. (Y2 side)	6
3305	B1305	At blade exposure limit.	6
23306	V1306	Remnant box cylinder sensor error.	6
16307	O1307	S/T jig detection sensor error.	6
16308	O1308	Ionizer error was detected. (Lower arm)	6
6309	E1309	EmDrvErr	6
6310	E1310	Clamp status is abnormal.	6
6311	E1311	No Setup Position	6
16312	O1312	Abnormal device data. Please confirm device data.	6
6313	E1313	Cutting water temperature is over upper limit.	6
6314	E1314	No dummy workpiece.	6
6315	E1315	Kerf check error. Cancel full-auto operation.	6
6316	E1316	No dummy area left. Cancel full-auto operation.	6
6317	E1317	Power supply cooling fan stopped. Restart the machine.	6
6318	E1318	Shape is not found.	6
6319	E1319	More than 2 shapes were found	6
6320	E1320	Shape is out of recognition area.	6
2321	A1321	Angle Recognition failed.	6
6322	E1322	Shape Recognition data error.	6
6323	E1323	Surfactant error	7
3324	B1324	Z1-axis at blade wear amount limit.	6
3325	B1325	Z2-axis at blade wear amount limit.	6
6326	E1326	KEY SWITCH has been turned off.	6
6327	E1327	Please press READY-TO-RUN button.	6
6328	E1328	Please close all covers and turn off MAINTENANCE SWITCH.	6
6329	E1329	Water pressure of booster pump is increasing. Restart the machine.	6
6330	E1330	Water temperature of booster pump is rising. Restart after a while.	6
6331	E1331	Motor overcurrent error of booster pump. Restart the machine.	6
6332	E1332	Contrast ratio is too lower. Adjust the camera or replace the light.	6
6333	E1333	Process Time Out.	6
16334	O1334	Jig was detected at S/T.	6
2335	A1335	ALI_JIG: Lot Tolerance(Y) Error.	6
2336	A1336	ALI_JIG: Lot Tolerance(T) Error.	6
6337	E1337	WCS Stopped.	6
16338	O1338	Unable to connect to CO2Injector.	6
6339	E1339	host	6
6340	E1340	host	6
6341	E1341	host	6
6342	E1342	host	6
6343	E1343	host	6
6344	E1344	host	6
6345	E1345	Flow controller is abnormal.	6
23346	V1346	Remnant box brush sensor error.	6
3347	B1347	Please replace dresser board.	6
6348	E1348	CHILLER UNIT Temperature. limit over Error	6
6349	E1349	Backside blow nozzle position is abnormal. Please check.	6
2350	A1350	Y-AXIS index limit error.	6
2351	A1351	θ -AXIS index limit error.	6
6352	E1352	DTU error	6

Alarm List (Continued)

ALID	ALT X		ALCD
6353	E1353	host	6
6354	E1354	host	6
6355	E1355	host	6
6356	E1356	host	6
6357	E1357	host	6
23358	V1358	Vacuum pump does not work.(for Duct) (Z1)	6
23359	V1359	Water is not called off to vacuum pump.(for Duct) (Z1)	6
23360	V1360	Pressure of vacuum pump is abnormal.(for Duct) (Z1)	6
23361	V1361	Vacuum pump does not work.(for Duct) (Z2)	6
23362	V1362	Water is not called off to vacuum pump.(for Duct) (Z2)	6
23363	V1363	Pressure of vacuum pump is abnormal.(for Duct) (Z2)	6
16364	O1364	One or more workpieces have been incompletely cut.	6
3365	B1365	Auto height adjust value exceeded the permissible value.	6
6366	E1366	Carbonated water resistivity upper limit error.	8
6367	E1367	Carbonated water resistivity lower limit error.	8
6368	E1368	Illegal directory.	8
3369	B1369	Blade Cut Len Error :NOW (Z1)	6
3370	B1370	Blade Cut Len Error :NOW (Z2)	6
3371	B1371	Blade Cut Len Error :NEXT (Z1)	6
3372	B1372	Blade Cut Len Error :NEXT (Z2)	6
6373	E1373	Some item(s) passed the PM period.Make sure the maintenance scheduler.	6
23374	V1374	No workpiece on inspection stage.	6
23375	V1375	No workpiece on UV stage.	6
3376	B1376	Z1-axis hub setup.	6
3377	B1377	Z2-axis hub setup.	6
6378	E1378	Can not perform WCS at current position.	6
6379	E1379	Max allowable WCS offset error	6
6380	E1380	WCS Tolerance error	6
6381	E1381	Z1 spindle load current upper limit (mA)(Z-EM)	8
6382	E1382	Z2 spindle load current upper limit (mA)(Z-EM)	8
6383	E1383	Malfunction in Spindle Protective Circuit.	6
6384	E1384	CPU Board Battery is Empty.	6
6385	E1385	CPU Board Battery Level is Low.	6
23386	V1386	Microscope up error.	6
23387	V1387	Microscope down error.	6
6388	E1388	Height abnormality detected.Cutting Cancelled.	6
6389	E1389	Cutting water flow error.	6
6390	E1390	Target check error.	6
6391	E1391	Drainage facility error was detected.	6
2392	A1392	Workpiece center offset deviation error.	6
2393	A1393	Workpiece diameter deviation error.	6
2394	A1394	Workpiece diameter tolerance error.	6
6395	E1395	Ultrasonic cleaning deivcie error (Z1)	2
6396	E1396	Water for Ultrasonic cleaning device error (Z1)	2
6397	E1397	Ultrasonic cleaning device error (Z2)	2
6398	E1398	Water for Ultrasonic cleaning device error (Z2)	2
6399	E1399	Cassete Barcode sensor error.	6
6400	E1400	Special wheel cover change error.(Z1)	6
6401	E1401	Special wheel cover change error.(Z2)	6
6402	E1402	High Pressure Pump is upper limit error.(Z1)	6
6403	E1403	High Pressure Pump is lower limit error.(Z1)	6
6404	E1404	High Pressure Pump is upper limit error.(Z2)	6
6405	E1405	High Pressure Pump is lower limit error.(Z2)	6
6406	E1406	Host comm:Received terminal message. Press Terminal to check.	6

Alarm List (Continued)

ALID	ALTX		ALCD
3407	B1407	Blade Replacement Error. Replace Blade.(Z1)	6
3408	B1408	Blade Replacement Error. Replace Blade.(Z2)	6
23409	V1409	Upper arm speed error.	6
23410	V1410	Lower arm speed error.	6
6411	E1411	External adjustment : Communication timeout error.	6
6412	E1412	External adjustment : Offset adjust limit error.	6
6413	E1413	External adjustment : Alignment average deviation error.	6
6414	E1414	External adjustment : Load offset limit error.	6
6415	E1415	External adjustment : Package data error.	6
6416	E1416	External adjustment :	6
6417	E1417	External adjustment :	6
6418	E1418	External adjustment :	6
6419	E1419	External adjustment :	6
6420	E1420	External adjustment :	6
6421	E1421	External adjustment :	6
6422	E1422	External adjustment :	6
6423	E1423	Cannot full auto start. (Alignment Pattern is abnormal)	6
6424	E1424	Cannot full auto start. (Kerf Check mode is abnormal)	6
6425	E1425	Cannot full auto start. (Setup Data is abnormal)	6
6426	E1426	Work Loading Area Cover opened.	6
16427	O1427	The Barcode does not consistent with data.	6
6428	E1428	Height abnormality detected.Cutting Cancelled.(Z1)	6
6429	E1429	Height abnormality detected.Cutting Cancelled.(Z2)	6
6430	E1430	Z1 height is illegal.(work+tape)	6
6431	E1431	Z2 height is illegal.(work+tape)	6
6432	E1432	Z1 height is illegal.(tape)	6
6433	E1433	Z2 height is illegal.(tape)	6
3434	B1434	Balancing is not complete.(Z1)	6
3435	B1435	Balancing is not complete.(Z2)	6
6436	E1436	Wheel Cover is open.(Z1)	6
6437	E1437	Wheel Cover is open.(Z2)	6
3438	B1438	Setup voltage is unusual.(Z1)	6
3439	B1439	Setup voltage is unusual.(Z2)	6
3440	B1440	Multi-Blade Setup difference error.(Z1)	6
3441	B1441	Multi-Blade Setup difference error.(Z2)	6
3442	B1442	Non-Contact setup check error.(WIDTH)	6
3443	B1443	Non-Contact setup check error.(DIFFERENCE)	6
6444	E1444	WARNING! Mechanical Spindle Warming up is not complete.	6
6445	E1445	Ultrasonic Cleaning Device is not installed.(Z1)	6
6446	E1446	Ultrasonic Cleaning Device is not installed.(Z2)	6
6447	E1447	Kerf Check board life limit.	6
6448	E1448	It is outside kerf check area.	6
23449	V1449	Up Error (WID reader cylinder)	6
23450	V1450	Down Error (WID reader cylinder)	6
23451	V1451	WID reader position sensor error.	6
16452	O1452	Axis for clean-cut is different from axis for chip-cut.	6
3453	B1453	Z1-axis at blade life limit.(device data)	6
3454	B1454	Z2-axis at blade life limit.(device data)	6
23455	V1455	Pressure of vacuum pump is abnormal.(for Duct) (Z1/Z2)	6
6456	E1456	Z-axis down speed is abnonal.	6
6457	E1457	Workpiece thickness auto measurement error.	6
6458	E1458	Workpiece thickness auto measurement result limit error.	6
3459	B1459	Z1-axis at blade exposure warning value.	6
3460	B1460	Z2-axis at blade exposure warning value.	6

Alarm List (Continued)

ALID	ALT	ALTX	ALCD
2461	A1461	The jig groove is not corresponding.(SET)	6
3462	B1462	BLADE WEAR AMOUNT ERROR	6
3463	B1463	Blade O.D. is abnormal.	6
6464	E1464	The cutting water current amount setting is abnormal.	6
6465	E1465	The setting of the CO2Injector is abnormal.	6
16466	O1466	Clear the No.in counter to start FullAuto.	6
16467	O1467	FullAuto can't be processed since No.in counter reaches limit.	6
6468	E1468	C/T Water curtain lower limit.	6
3469	B1469	V-Nozzle Open Error (Z1)	6
3470	B1470	V-Nozzle Open Error (Z2)	6
2471	A1471	Focus threshold level is wrong. Please adjust threshold level data.	6
6472	E1472	Surfactant tank error	7
6473	E1473	Z1-axis spindle cooling water flow error.(lower limit)	6
6474	E1474	Z1-axis spindle cooling water flow error.(upper limit)	6
6475	E1475	Z2-axis spindle cooling water flow error.(lower limit)	6
6476	E1476	Z2-axis spindle cooling water flow error.(upper limit)	6
6477	E1477	Water Curtain is abnormal.(lower limit)	6
6478	E1478	Water Curtain is abnormal.(upper limit)	6
6479	E1479	Spinner Nozzle Clean Water is abnormal.(lower limit)	6
6480	E1480	Spinner Nozzle Clean Water is abnormal.(upper limit)	6
6481	E1481	Alignment Pattern is not corresponding to Teach Entry Pattern.	6
6482	E1482	S EM is activated.	6
6483	E1483	Please lock cover. (Handling cover : Front)	6
6484	E1484	Please lock cover. (Handling cover : Rear)	6
16485	O1485	No workpiece at frame centering(Upper).Press<Alarm/Clr>and remove it.	7
16486	O1486	No workpiece at frame centering(Lower).Press<Alarm/Clr>and remove it.	7
16487	O1487	Remove the workpiece at frame centering guide.(Upper)	7
16488	O1488	Remove the workpiece at frame centering guide.(Lower)	7
2489	A1489	Y index measure limit error.	6
2490	A1490	Y index measure limit error.(Single)	6
6491	E1491	Mist collector box overflow.	6
6492	E1492	Barcode:different	6
6493	E1493	No workpiece on W/T	6
16494	O1494	Communication timeout error.(Laser)	6
16495	O1495	Communication error.(Laser)	6
16496	O1496	Laser machine error.	6
16497	O1497	The external transfer arm is located in dicer.	6
6498	E1498	Please load measurement data.	6
6499	E1499	he amount of the BBD maximum penetration is below a set value.	6
25500	X1500	ABC-X-axis unrecoverable error. Re-start the machine.	6
25501	X1501	ABC-X-axis unknown error.....Reinitialize.	6
25502	X1502	ABC-X-axis servo error. Re-start the machine.	6
25503	X1503	ABC-X-axis CW end error.....Reinitialize	6
25504	X1504	ABC-X-axis CCW end error.....Reinitialize.	6
25505	X1505	ABC-X-axis vibration error(near).....Reinitialize.	6
25506	X1506	ABC-X-axis vibration error(far).....Reinitialize.	6
25507	X1507	ABC-X-axis position error.....Reinitialize.	6
25508	X1508	ABC-X-axis scale retry error.....Reinitialize.	6
25509	X1509	ABC-X-axis parameter error.....Reinitialize.	6
25510	X1510	ABC-Z-axis unrecoverable error. Re-start the machine.	6
25511	X1511	ABC-Z-axis unknown error.....Reinitialize.	6
25512	X1512	ABC-Z-axis servo error. Re-start the machine.	6
25513	X1513	ABC-Z-axis CW end error.....Reinitialize	6
25514	X1514	ABC-Z-axis CCW end error.....Reinitialize.	6

Alarm List (Continued)

ALID		ALT	ALCD
25515	X1515	ABC-Z-axis vibration error(near).....Reinitialize.	6
25516	X1516	ABC-Z-axis vibration error(far).....Reinitialize.	6
25517	X1517	ABC-Z-axis position error.....Reinitialize.	6
25518	X1518	ABC-Z-axis scale retry error.....Reinitialize.	6
25519	X1519	ABC-Z-axis parameter error.....Reinitialize.	6
6520	E1520	ABC Nut Holder Error.	6
6521	E1521	ABC Nut Slider Error.	6
6522	E1522	ABC Blade Holder Error.	6
6523	E1523	ABC Blade Slider Error.	6
6524	E1524	ABC Unable to lock Cover.	6
6525	E1525	ABC Blade Stocker Error.	6
6526	E1526	ABC Nut Setting Error.	6
6527	E1527	ABC Nut Remove Error.	6
6528	E1528	ABC Cover Opened. (Blade Stocker)	6
6529	E1529	ABC Data and # of Installation of the BladeStocker are different.	6
6530	E1530	ABC NEW Blade Stocker is Empty.	6
6531	E1531	ABC USED Blade Stocker is Full.	6
6532	E1532	Has the Blade/Nut been dropped? Please confirm, and SystemInitial.	6
6533	E1533	Precut Work not found.	6
6534	E1534	It failed in the interrupt of work.	6
6535	E1535	Precut after blade exchange is not done. FullAuto is canceled	6
6536	E1536	ABC ABC Unit has a Blade/Nut.	6
6537	E1537	ABC Unable to unlock Cover.	6
6538	E1538	ABC Two New blades or more were removed.	6
6539	E1539	ABC The cutting cover is not open.	6
6540	E1540	ABC Blade is not set in the holder.	6
6541	E1541	-- ABC Reserved --	6
6542	E1542	-- ABC Reserved --	6
6543	E1543	-- ABC Reserved --	6
6544	E1544	-- ABC Reserved --	6
6545	E1545	-- ABC Reserved --	6
6546	E1546	-- ABC Reserved --	6
6547	E1547	-- ABC Reserved --	6
6548	E1548	-- ABC Reserved --	6
6549	E1549	-- ABC Reserved --	6
6550	E1550	-- ABC Reserved --	6
6551	E1551	Duct unit is abnormal. (CUT)	6
6552	E1552	Duct unit is abnormal. (Spinner)	6
6553	E1553	Z1 cut water flow(R,F) upper limit. (FlowSensor)	6
6554	E1554	Z2 cut water flow(R,F) upper limit. (FlowSensor)	6
6555	E1555	Z1 cut water flow(SHW) upper limit. (FlowSensor)	6
6556	E1556	Z2 cut water flow(SHW) upper limit. (FlowSensor)	6
6557	E1557	Z1 cut water flow(R,F) lower limit. (FlowSensor)	6
6558	E1558	Z2 cut water flow(R,F) lower limit. (FlowSensor)	6
6559	E1559	Z1 cut water flow(SHW) lower limit. (FlowSensor)	6
6560	E1560	Z2 cut water flow(SHW) lower limit. (FlowSensor)	6
6561	E1561	StayCleanInjector is abnormal.	6
6562	E1562	Insufficient Clean air pressure.....Reinitialize.	2
6563	E1563	Illegal Position (Z1 Cut start)	6
6564	E1564	Illegal Position (Z2 Cut start)	6
6565	E1565	θ Angle regulate tolerance error.	6
6566	E1566	Chuck table washing brush is attached. (full-cut is chosen)	6
6567	E1567	Chuck table washing brush is not attached. (half-cut is chosen)	6

Alarm List (Continued)

ALID	ALTX		ALCD
6568	E1568	Blade information does not accord. Device data()	6
6569	E1569	Heater is abnormal.	6
25570	X1570	Lower Arm-axis unrecoverable error. Re-start the machine.	6
25571	X1571	Lower Arm-axis unknown error.	6
25572	X1572	Lower Arm-axis servo error. Re-start the machine.	6
25573	X1573	Lower Arm-axis CW end error.	6
25574	X1574	Lower Arm-axis CCW end error.	6
25575	X1575	Lower Arm-axis vibration error(near).	6
25576	X1576	Lower Arm-axis vibration error(far).	6
25577	X1577	Lower Arm-axis position error.	6
25578	X1578	Lower Arm-axis scale retry error.	6
25579	X1579	Lower Arm-axis parameter error.	6
25580	X1580	Upper Arm-axis unrecoverable error. Re-start the machine.	6
25581	X1581	Upper Arm-axis unknown error.	6
25582	X1582	Upper Arm-axis servo error. Re-start the machine.	6
25583	X1583	Upper Arm-axis CW end error.	6
25584	X1584	Upper Arm-axis CCW end error.	6
25585	X1585	Upper Arm-axis vibration error(near).	6
25586	X1586	Upper Arm-axis vibration error(far).	6
25587	X1587	Upper Arm-axis position error.	6
25588	X1588	Upper Arm-axis scale retry error.	6
25589	X1589	Upper Arm-axis parameter error.	6
25590	X1590	Unload Elevator-axis unrecoverable error. Re-start the machine.	6
25591	X1591	Unload Elevator-axis unknown error.	6
25592	X1592	Unload Elevator-axis servo error. Re-start the machine.	6
25593	X1593	Unload Elevator-axis CW end error.	6
25594	X1594	Unload Elevator-axis CCW end error.	6
25595	X1595	Unload Elevator-axis vibration error(near).	6
25596	X1596	Unload Elevator-axis vibration error(far).	6
25597	X1597	Unload Elevator-axis position error.	6
25598	X1598	Unload Elevator-axis scale retry error.	6
25599	X1599	Unload Elevator-axis parameter error.	6
6600	E1600	Cannot unload into Reject Stage.	6
6601	E1601	Cannot unload into unloader stage.	6
6602	E1602	Please check loader stage. No wafer detected.	6
6603	E1603	-- Solaria Reserved --	6
6604	E1604	-- Solaria Reserved --	6
6605	E1605	-- Solaria Reserved --	6
6606	E1606	-- Solaria Reserved --	6
6607	E1607	-- Solaria Reserved --	6
6608	E1608	-- Solaria Reserved --	6
6609	E1609	-- Solaria Reserved --	6
6610	E1610	-- Solaria Reserved --	6
6611	E1611	Remnant disposal flow sensor error.(Spinner)	6
6612	E1612	Settling tank does not work. Water off.	6
6613	E1613	Water leaking detected (Settling tank). Water off.	6
6614	E1614	Mist collector power off.	6
6615	E1615	Transportation processes are different.	6
6616	E1616	Cut air is abnormal. Please confirm it.	6
6617	E1617	Jig transportation clamp is abnormal. Please confirm it.	6
6618	E1618	PE Ground default detect. check the ground master unit.	6
16619	O1619	Host did not certify frame ID.	6
16620	O1620	Abnormal arm size. Please confirm arm size.	6
16621	O1621	Chosen items were not consistent with the data.	6

Alarm List (Continued)

ALID	ALT		ALCD
16622	O1622	No workpiece to load.	6
16623	O1623	Loading completed.	6
16624	O1624	Full Auto completed.	6
16625	O1625	Cut position adjustment limit over.	6
3626	B1626	The blade outer diameter of the Z1 axis is abnormal.	6
3627	B1627	The blade outer diameter of the Z2 axis is abnormal.	6
6628	E1628	-- Stay CleanInjector Reserved --	6
6629	E1629	-- Stay CleanInjector Reserved --	6
6630	E1630	-- Stay CleanInjector Reserved --	6
6631	E1631	-- Stay CleanInjector Reserved --	6
6632	E1632	-- Stay CleanInjector Reserved --	6
2633	A1633	Passed lines continue.	6
12634	K1634	Laser groove check LS1 MAX error.	6
12635	K1635	Laser groove check LS1 MIN error.	6
12636	K1636	Laser groove check LS2 MAX error.	6
12637	K1637	Laser groove check LS2 MIN error.	6
12638	K1638	Laser groove check Cut Placement MAX error.	6
12639	K1639	Laser groove check Cut Placement MIN error.	6
12640	K1640	Laser groove check ablation shelf MIN error.	6
2641	A1641	Recognized line is nothing.	6
2642	A1642	Percentage of recognized line is less than setting.	6
16643	O1643	FFU error was detected.	6
12644	K1644	Cut position adjustment to groove center over the limit.	6
3645	B1645	Z1-axis setup error (C/T<->Sensor Dist error)	6
3646	B1646	Z2-axis setup error (C/T<->Sensor Dist error)	6
6647	E1647	Alignment is not in process control	6
6648	E1648	Alignment is not in process control. SEQ =	6