

4. STATUS SECTION

Contents

4 STATUS	STATUS01-10
4.1 Functions	STATUS01-10
4.2 Explanation of Screens	STATUS02-10
4.3 Relationships Between Displayed Screens	STATUS03-10
4.4 Activating and Terminating STATUS	STATUS04-10
4.4.1 Activating STATUS	STATUS04-10
4.4.2 Terminating STATUS	STATUS04-30
4.5 STATUS Display	STATUS05-10
4.5.1 Updating the STATUS display	STATUS05-10
4.5.2 Main screen	STATUS05-10
4.5.3 DKC	STATUS05-20
4.5.4 DKU	STATUS05-80
4.5.5 Copy status	STATUS05-100
4.5.6 Parity group	STATUS05-100
4.5.7 Logical devices	STATUS05-100
4.5.8 Microprogram version	STATUS05-110
4.5.9 LCP/MCP Path	STATUS05-150
4.5.10 RAID Status Display	STATUS05-160
4.5.11 SCSI PATH Status	STATUS05-190
4.6 Error or Failure Status Action	STATUS06-10

4 STATUS

4.1 Functions

All status items, including the status of the logic board, memory board, drive, and other components can be monitored through the SVP screens.

The following information items can be displayed:

(1) Status of the DKC and DKU

Status for the entire configurations or components of the DKC and DKU. The following status types are displayed on the hierarchical screens:

normal, blocked, failed, non-mounted, and operation.

(2) Copy status

During a copy operation, the type of copy, the copy destination, and progress are displayed.

(3) Logical device information

Information on the mounted logical devices is displayed.

(4) Parity group information

Information on the mounted parity group is displayed.

(5) Microprogram version information

The version information on the micro-program currently running and that saved on the SVP hard disk are displayed.

(6) LCP/MCP Path information

The physical/logical path status is displayed for the LCP, RCP and MCP.

A faulty part may not necessarily be located by the STATUS function. Information for action to be taken to correct the cause of a failure is not provided. Take action according to the action code (ACC). Since the SVP is used, the knowledge of SVP (PC) operations is required.

4.2 Explanation of Screens

Items common to all status display screens is shown below.

The buttons, labeled with each part name are displayed on the screen. These buttons indicate the status, as follows:

Normal status	: Valid button (The name of the part is displayed clearly. The button is not blinking.)
Blocked status (Under maintenance or failure)	: Blinking button (The button is blinking.)
Non-mounted status	: Invalid button (The name of the part is dimmed.)
No information due to a failure	: "----" button ("----" is displayed on the button.)
Others	: A running status (for example, copy status) is indicated on the button or the lower layered screen.

For some parts, detailed information can be obtained. Select the button and call the lower layered screen.

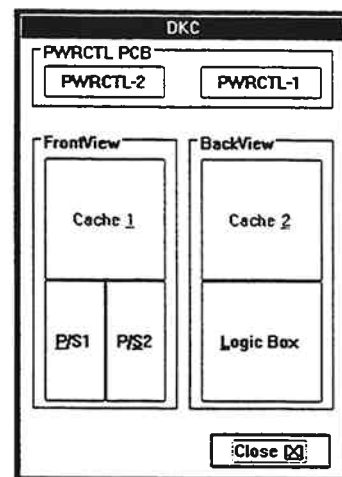
For more information, see the hierarchy of screens and the explanation of each screen, shown below.

To go back to the previous layered screen, select (CL) [Close(X)].

An explanation is given using the 'DKC' window on the right.
(Assume that the Logic Box is blinking.)

Cache1,Cache2	-----	Non-mounted
P/S1,P/S2	-----	Normal
PWRCTL-1,PWRCTL-2	--	Normal
Logic Box	-----	Blocked (failure or under maintenance)

Detailed information on the blocked status is displayed on the lower layered screen which is brought up by selecting (CL) the Logic Box button. For PWRCTL-1 and PWRCTL-2, this screen is the lowest layered screen (see hierarchy in 4.3).



4.3 Relationships between Displayed Screens

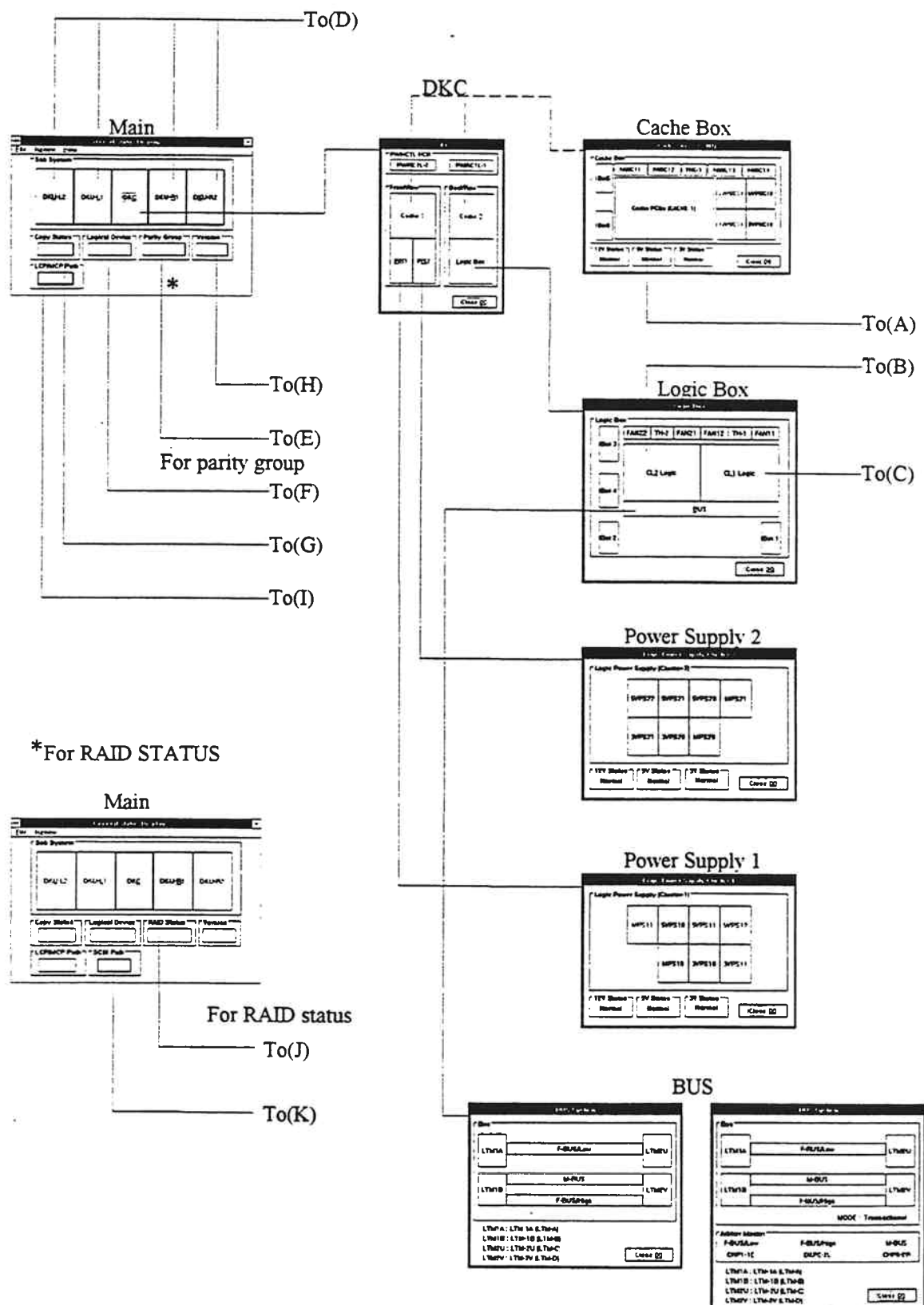


Figure 4-1 Hierarchy of Screens (1/6)

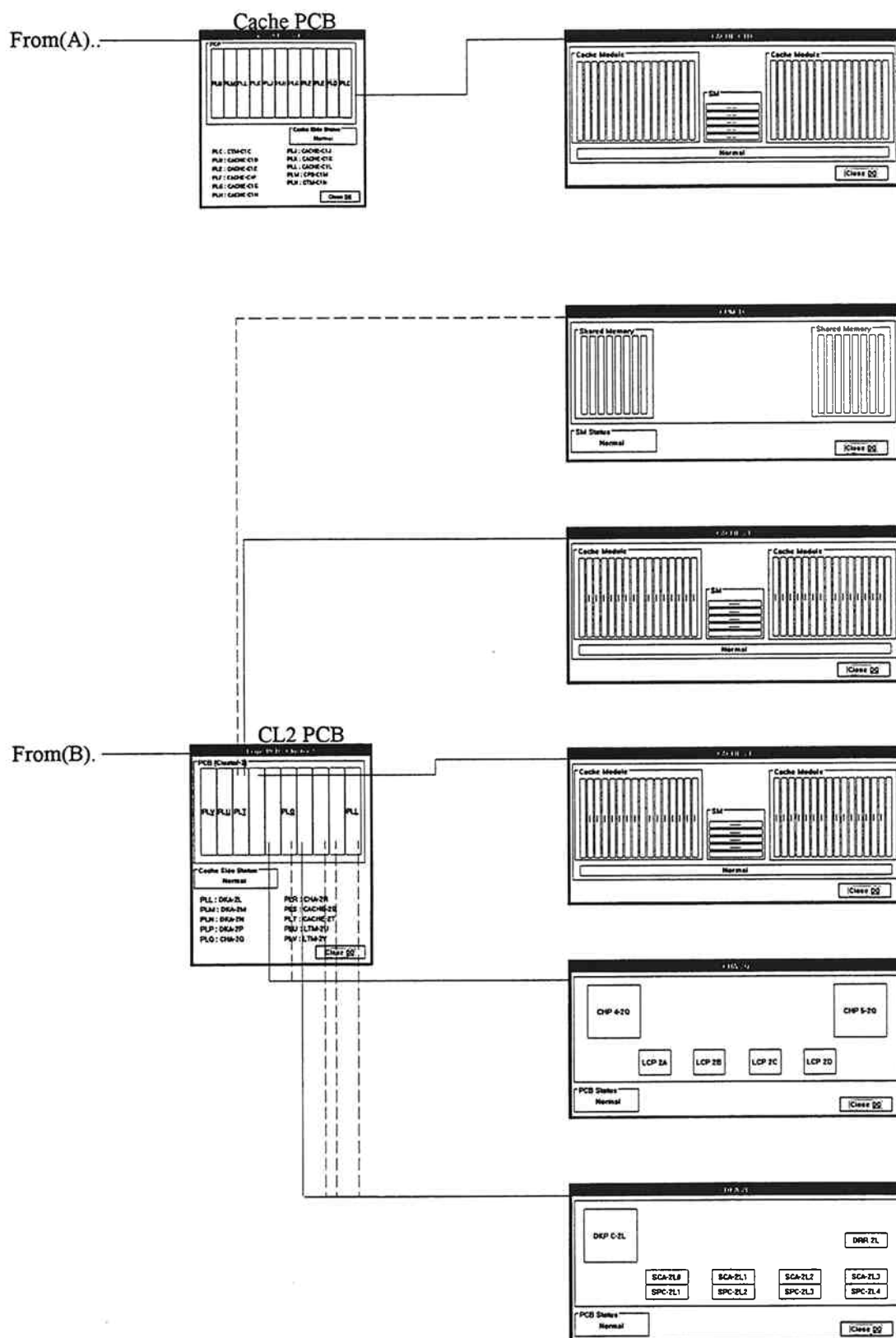


Figure 4-1 Hierarchy of Screens (2/6)

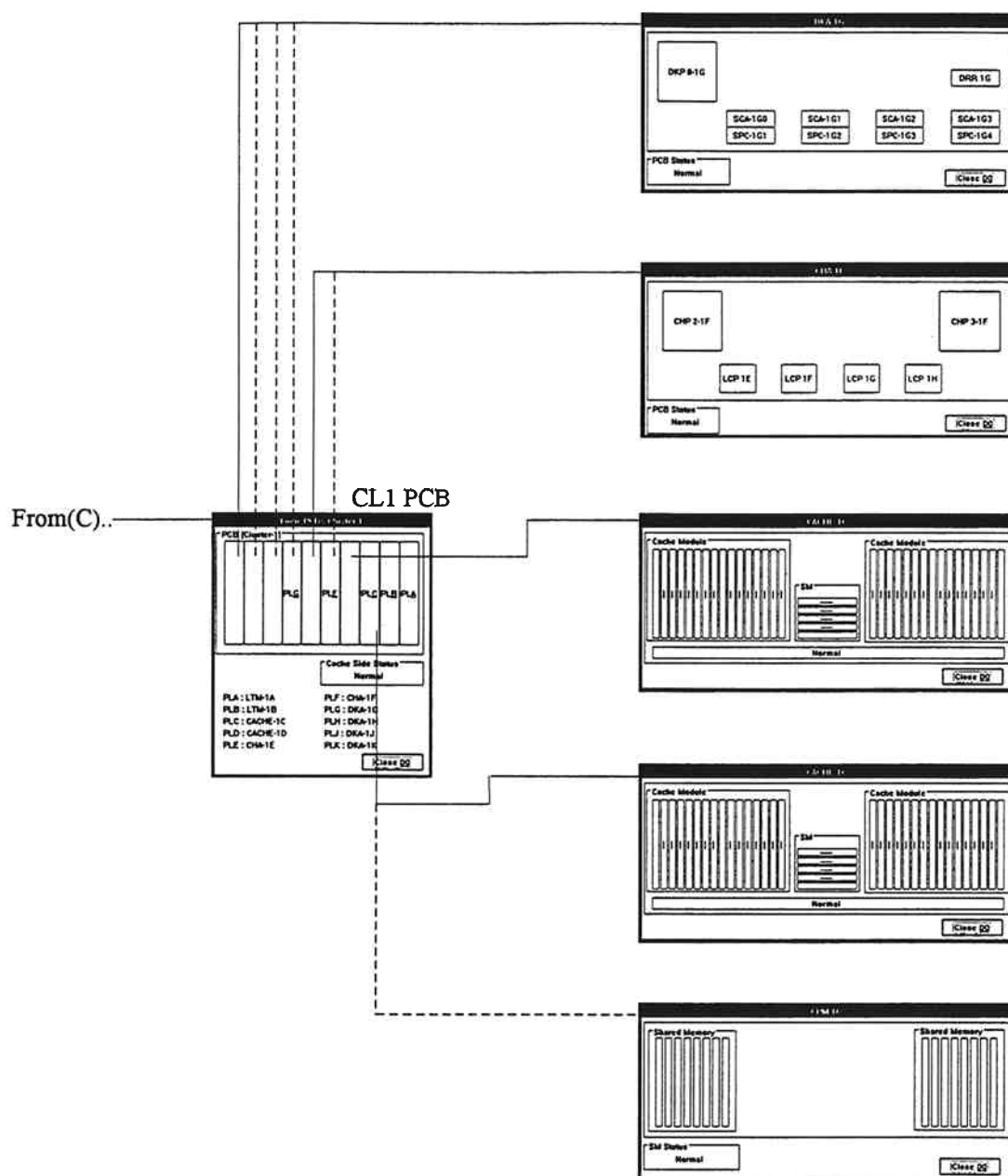


Figure 4-1 Hierarchy of Screens (3/6)

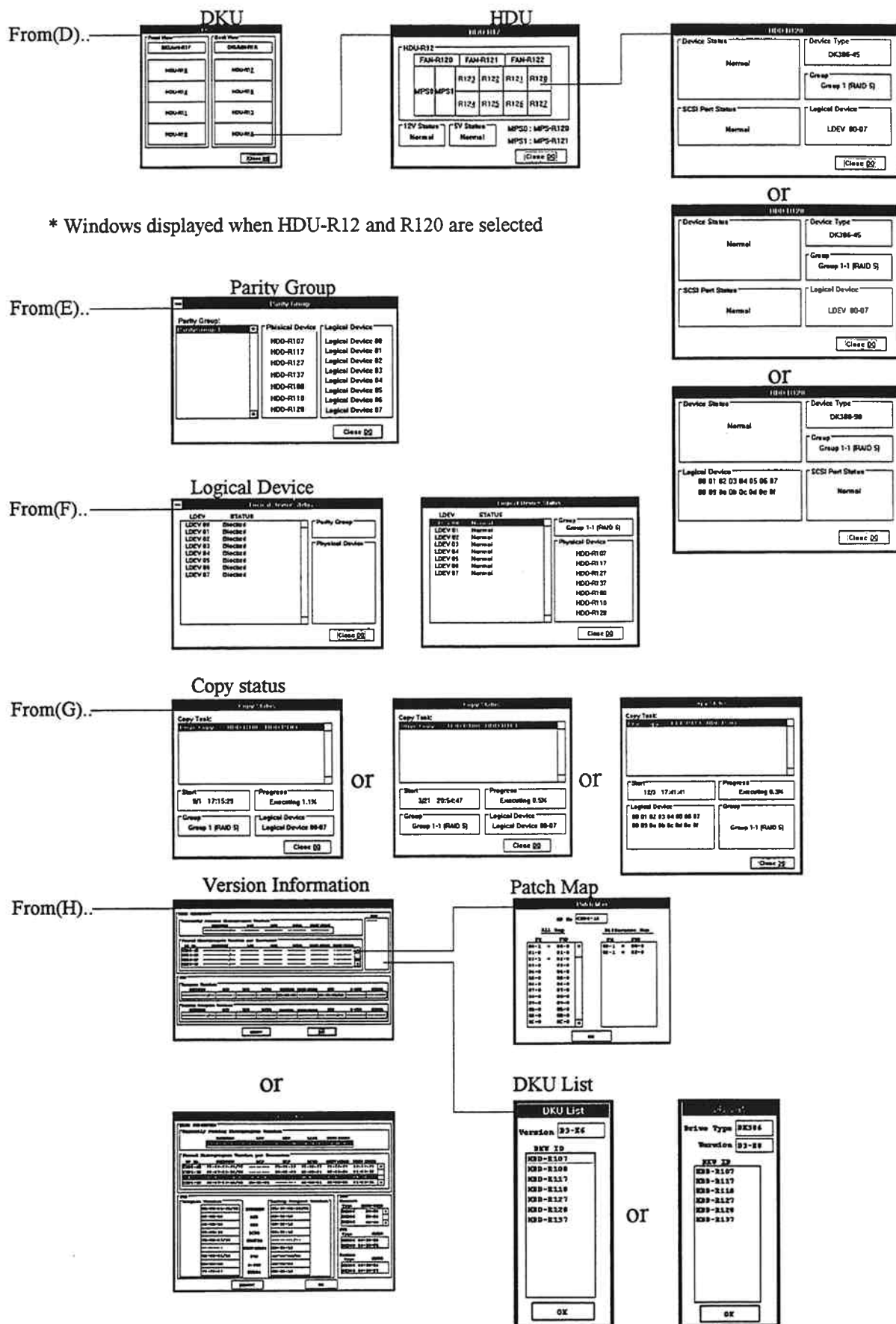
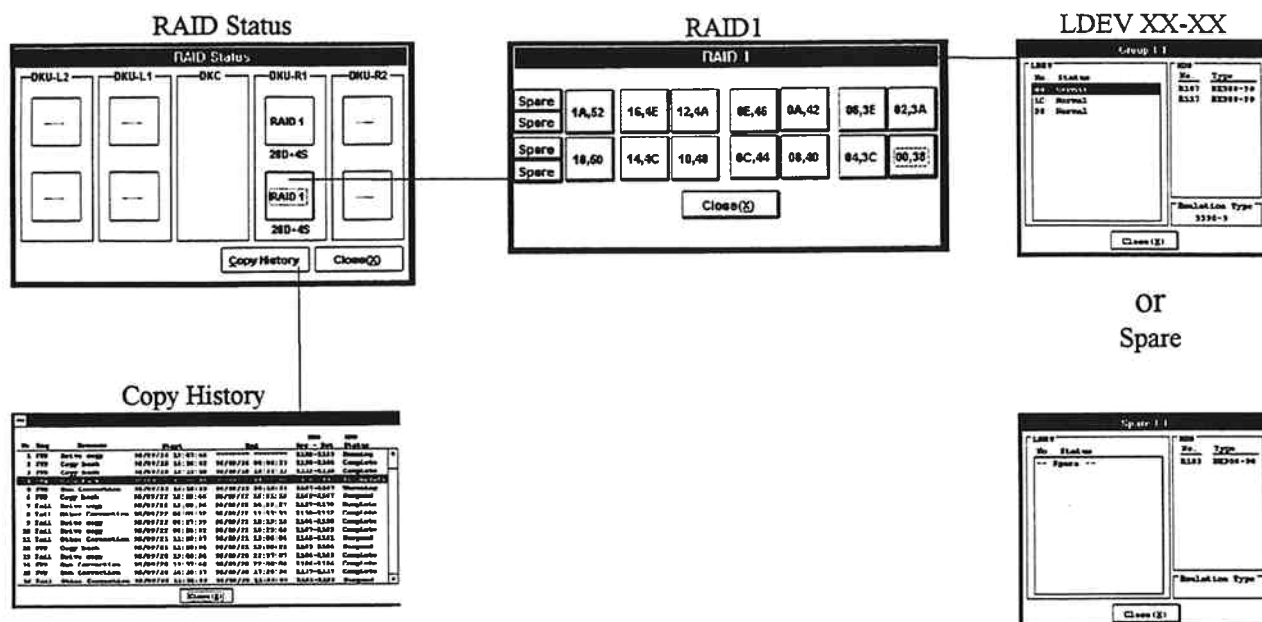


Figure 4-1 Hierarchy of Screens (4/6)



From(J).. (Case of RAID 1)



From (K)..

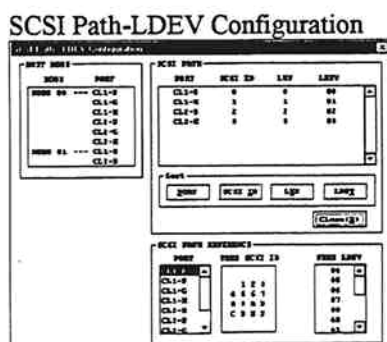
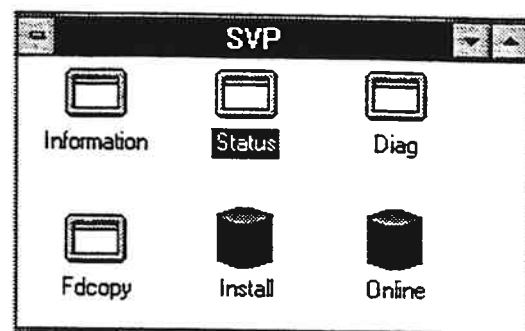


Figure 4-1 Hierarchy of Screens (6/6)

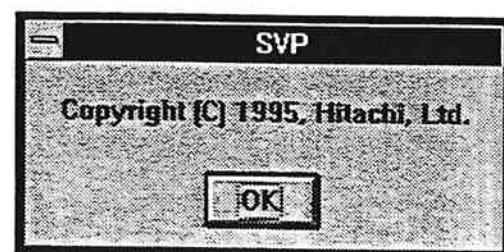
4.4 Activating and Terminating STATUS

4.4.1 Activating STATUS

- (1) Select (DC) the [Status] icon in the 'SVP' window.



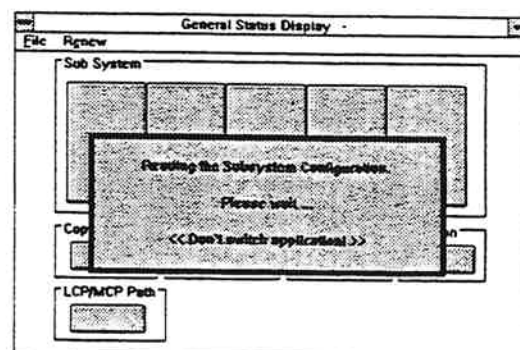
- (2) The copyright information will appear.
Select (CL) [OK].



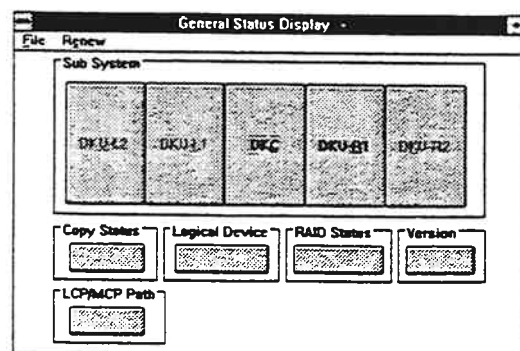
- (3) The 'General Status Display' window will appear, on which the message "Reading the Subsystem Configuration. Please wait..." is displayed.

Upon completion of reading the system configuration information, go to step (4). If a read error occurs, go to step (5).

- * Please do not change an application's window until SVP-DKC communication finish.



- (4) The main screen shown on the right will appear on the 'General Status Display' window, completing activation of STATUS.



- (4-1) If an error occurs, the nature of error is displayed.

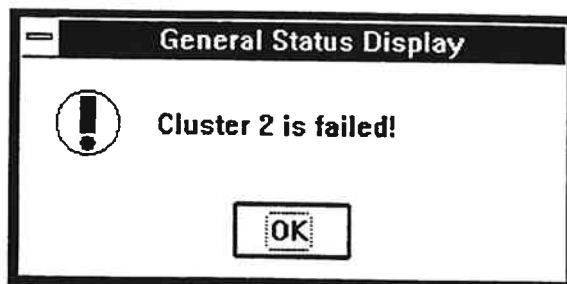
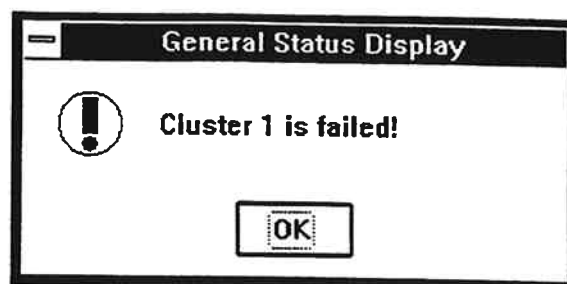
"Cluster X is failed!"

X : 1 or 2

Select (CL) [OK].

If status of power supplies is failure (refer to step 4.5.3 (STATUS05-20)), see TROUBLE SHOOTING SECTION (refer to step 6.3.2.7 (TRBL03-80)).

If status of power supplies is normal (refer to step 4.5.3 (STATUS05-20)), see SVP SECTION (refer to step 10.2.19 (SVP02-840)).



- (5) If an error occurs, the nature of the error is displayed.

① "Connection error occurred. SVP-XXX" is displayed.

XXX : DKC or SSVP

② "Initializing SSVP (Phase X/16) Please Wait"

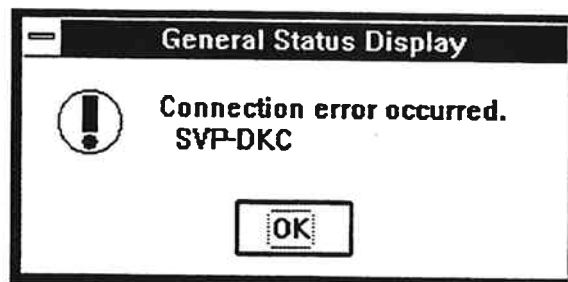
X : 1~15

③ "SSVP Dump is being performed (Phase X/15).

Environment Status Can't be read."

X : 1~15

Select (CL) [OK].

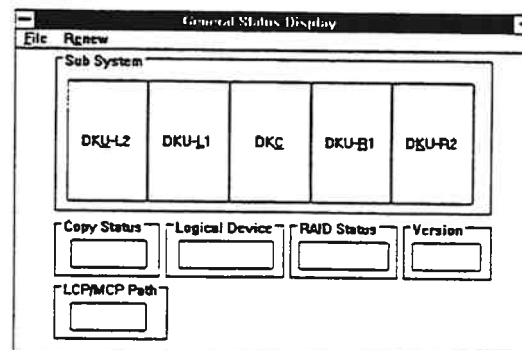


- (6) The similar screen as in step (4) will appear, but the buttons are indicated by "—" to indicate an error.

Terminate STATUS and remove the cause of the error. Then reactivate STATUS.

Note : When a communication error has occurred on either the SVP-DKC or the SVP-SSVP, the status that was taken through communication is displayed.

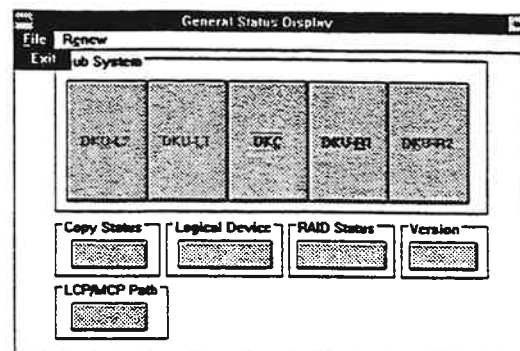
The example on the right is the screen displayed when a SVP-DKC communication error occurs.



* When a communication error has occurred on either SVP-DKC or SVP-SSVP, refer to the "6.5.4 Recovery Procedure for LAN Error (TRBL05-70)".

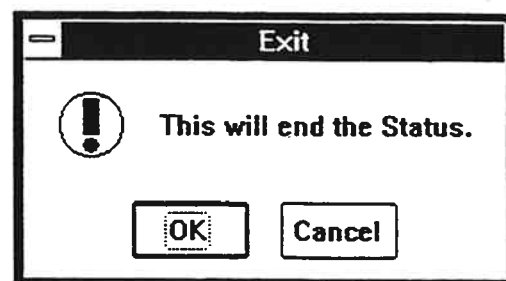
4.4.2 Terminating STATUS

- (1) Close the 'General Status Display' window.
 Select (CL) [File] - [Exit] in menu bar on 'General Status Display'. (Screen on the right.)
 or
 Select (DC) Control Box at the left on the title bar.
 or
 Select (CL) Control Box - [Close].



- (2) The 'Exit' dialog box will appear.
 Select (CL) [OK].

STATUS is now terminated.

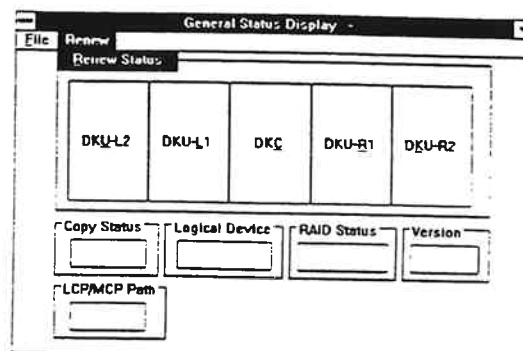


4.5 STATUS Display

4.5.1 Updating the STATUS display

The STATUS display remains unchanged while the screen is displayed or being switched.
To display the latest status, follow the procedure below.

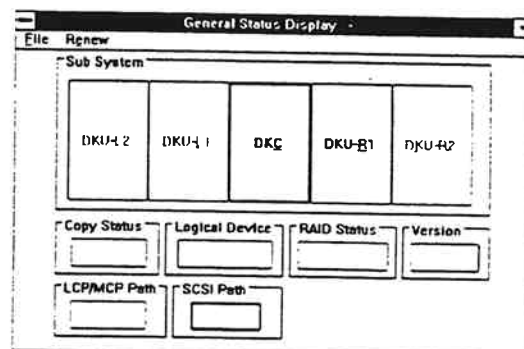
- (1) Select (CL) [Renew] - [Renew Status] in the menu bar on the main screen. (Screen on the right)
- or
- (2) Terminate STATUS and activate it again.



4.5.2 Main screen

After STATUS is activated, the buttons on the 'General Status Display' window indicate each status as follows.

- | | |
|-----------------------|---|
| DKC | Status of the DKC (Details are displayed on the lower layered screen.)
Valid button : Normal
Blinking button : Failure or under maintenance |
| DKU-R1,R2,L1,L2 | Status of the DKU (Details are displayed on the lower layered screen.)
Valid button : Normal
Blinking button : Failure or under maintenance or during a copy operation
Invalid button : Non-mounted |
| Copy Status | Status of copy work
Blinking "Copy" in the button : Copy work is in progress. (Details are displayed on the lower layered screen.)
No display in the button : Copy work is not performed. (The lower layered screen is not provided.) |
| Parity Group | Parity group information is displayed on the lower layered screen. (Note) |
| Logical Device | Logical device information is displayed on the lower layered screen. |
| Version | Version information on the micro-program is displayed on the lower layered screen. |
| LCP/MCP Path | LCP/MCP Path information is displayed on the lower layered screen. |
| RAID Status | RAID settings and copy history are displayed. |
| SCSI Path | SCSI Path definition is displayed. |



The menus in the menu bar are explained below.

- | | |
|-------------|---|
| Renew | The configuration information is read. The status display is updated. (Select (CL) [Renew] - [Renew Status].) |
| File | The pull-down menu to terminate STATUS appears.
Selecting (CL) [Exit] terminates STATUS. |

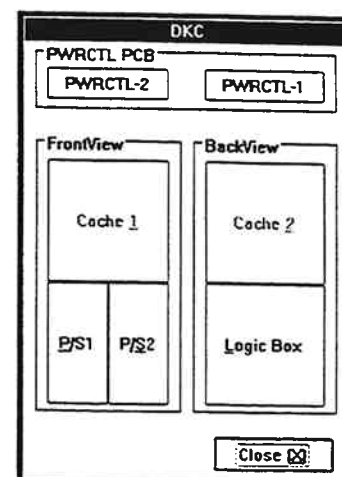
4.5.3 DKC

(1) Status of DKC

Select (CL) [DKC] on the main screen.

The 'DKC' window will appear.

- Cache1 ----- Status of Cache Box clusters 1 and 2 (Details are displayed on the lower layered screen.)
 Cache2 ----- Valid button : Normal
 Blinking button: Failure or under maintenance
 Invalid button : Non-mounted
- Logic Box --- Status of the Logic Box (Details are displayed on the lower layered screen.)
 Valid button : Normal
 Blinking button: Failure or under maintenance
 "----"button : No information due to an SVP-DKC error
- P/S1 ----- Status of power supplies for Logic Box clusters 1 and 2
 P/S2 ----- (Details are displayed on the lower layered screen.)
 Valid button : Normal
 Blinking button: Failure or under maintenance
 "----"button : No information due to SVP-SSVP error
- PWRCTL 1 -- Status of PWRCTL.
 PWRCTL 2 Valid button : Normal
 Blinking button: Failure

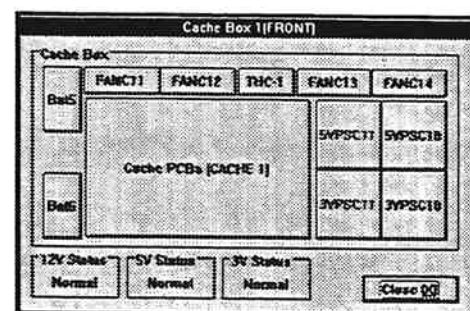


(2) Status of Cache Boxes 1 and 2

Select (CL) [Cache1] or [Cache2] in the 'DKC' window.

The 'Cache Box' window will appear.

- Cache PCBs - Status of the PCBs in the Cache Box (Details are displayed on the lower layered screen.)
 Valid button : Normal
 Blinking button : Failure or under maintenance
- 3VPSCn0 ---- Status of the Cache Box power supplies
 5VPSCn0 Valid button : Normal
 3VPSCn1 Blinking button : Failure
 5VPSCn1
- FANcN0 ----- Status of the fans in the Cache Box
 FANcN1 Valid button : Normal
 FANcN2 Blinking button : Failure
 FANcN3
- THC-n ----- Status of the temperature in the Cache Box
 Valid button : Normal
 Blinking button : Abnormal
- Bat5/7 ----- Status of the expanded Cache Box power supplies
 Bat6/8 Valid button : Normal
 Blinking button : Abnormal
- 12V Status --- Status of the 12 voltage in the Cache Box
 5V Status --- Status of the 5 voltage in the Cache Box
 3V Status --- Status of the 3 voltage in the Cache Box
 • Normal
 • Warning (abnormal)



The number n is 1 for Cache Box 1 or 2 for Cache Box 2.

(3) Status of PCB (Cache Box)

Select (CL) [Cache PCBs] in the 'Cache Box' window.

The 'Cache PCBs' window will appear.

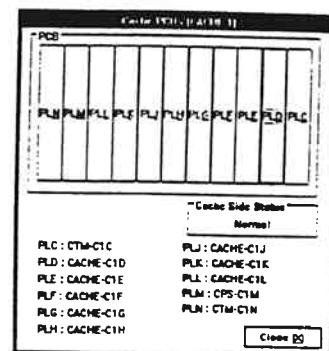
PLC ----- Cache Terminator (always valid display)
 PLD ----- Cache PCB status (Details are displayed on the lower
 PLE layered screen.)
 PLF Valid button : Normal
 PLG Blinking button : Failure or under maintenance
 PLH Invalid button : Non-mounted
 PLI
 PLJ
 PLK
 PLL

PLM ----- CPS (always valid display)

PLN ----- Cache Terminator (always valid display)

Cache Side Status - Status of the cache memory

- Normal
- Warning (abnormal)
- Blocked (blocked for maintenance)
- Failed (blocked due to a failure)



(4) Status of each PCB (Cache Box)

Select (CL) one of [PLD] to [PLL] in the 'Cache PCBs' window.

The window for the selected PCB will appear.

The same configuration is used for all PCBs.

Cache Module ----- Status of the cache memory module (Displayed for each module group)

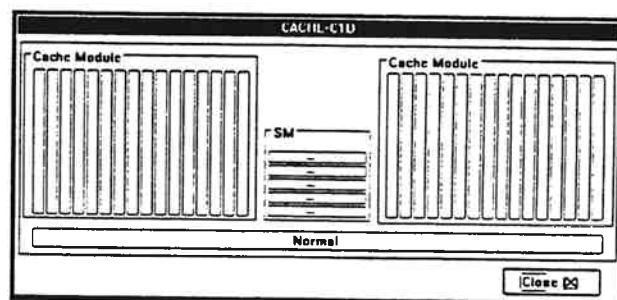
- Valid button : Normal
- Blinking '*' in the button : Failure
- '-' displayed in the button : Non-mounted

SM ----- Status of the shared memory module

- Valid button : Normal
- Blinking '*' in the button : Failure or under maintenance
- '-' displayed in the button : Non-mounted

PCB Status ----- Status of this package

- Valid button : Normal
- Blinking button : Warning (abnormal)
- : Blocked (blocked for maintenance)
- : Failed (blocked due to a failure)
- : Cache Access Error (PCB blocked and CMG normal)



(5) Status of the Logic Box

Select (CL) [Logic Box] in the 'DKC' window.

The 'Logic Box' window will appear.

CL1 Logic --- Status of Logic clusters 1 and 2 (Details are

CL2 Logic displayed on the lower layered screen.)

Valid button : Normal

Blinking button : Failure or under maintenance

Invalid button : Non-mounted

" --- "button : No information due to SVP-DKC error

Bat1 --- Status of the Logic Box batteries

Bat2 Valid button : Normal

Bat3 Blinking button : Failure

Bat4 " --- "button : No information due to SVP-SSVP error

FAN11 --- Status of the fans in the Logic Box

FAN12 Valid button : Normal

FAN21 Blinking button : Failure

FAN22 " --- "button : No information due to SVP-SSVP error

TH-1 --- Status of the temperature in the Logic Box

TH-2 Valid button : Normal

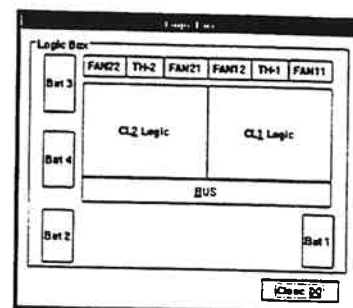
Blinking button : Abnormal

" --- "button : No information due to SVP-SSVP error

BUS --- Status of buses (Details are displayed on the lower layered screen.)

Valid button : Normal

Blinking button : Failure or under maintenance



(6) Status of PCB (Logic Box cluster 1)

Select (CL) [CL1 Logic] in the 'Logic Box' window.

The 'Logic PCBs' window for cluster 1 will appear.

PLA --- Terminator (always valid display)

PLB

PLC --- PCB back board status (Details are displayed on the lower layered screen.)

PLD Valid button : Normal

PLE Blinking button : Failure or under maintenance

PLF Invalid button : Non-mounted

PLH

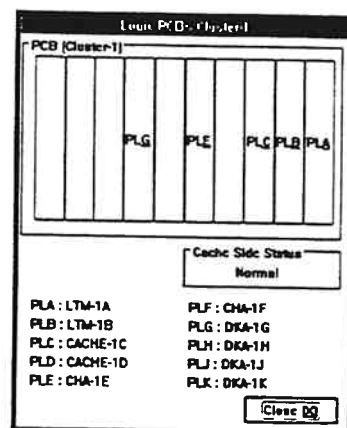
PLJ

PLK

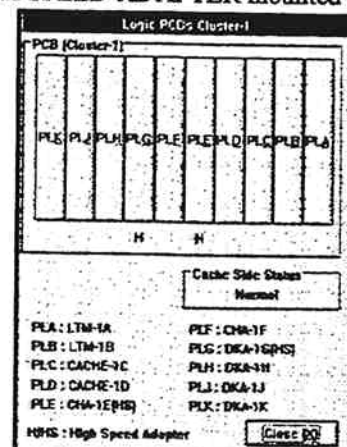
H/HS --- Display of high speed adapter mounted.

Cache Side Status - Status of the cache memory

- Normal
- Warning (abnormal)
- Blocked (blocked for maintenance)
- Failed (blocked due to a failure)



HIGH SPEED ADAPTER mounted



(7) Status of PCB (Logic Box cluster 2)

Select (CL) [CL2 Logic] in the 'Logic Box' window.

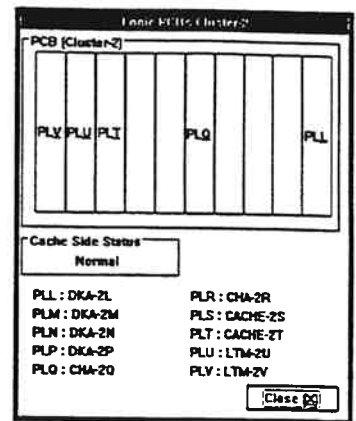
The 'Logic PCBs' window for cluster 2 will appear.

PLL ——— PCB back board status (Details are displayed on the
 PLM ——— lower layered screen.)
 PLN Valid button : Normal
 PLP Blinking button : Failure or under maintenance
 PLQ Invalid button : Non-mounted
 PLR
 PLS
 PLT
 PLU ——— Terminator (always valid display)
 PLV

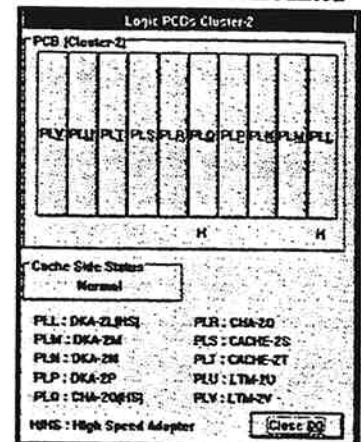
H/Hs ——— Display of high speed adapter mounted.

Cache Side Status - Status of the cache memory

- Normal
- Warning (abnormal)
- Blocked (blocked for maintenance)
- Failed (blocked due to a failure)



HIGH SPEED ADAPTER mounted



(8) Status of individual PCBs in the Logic Box

(a) Status of the PLD and PLS

Select (CL) [PLD] or [PLS] in the 'Logic PCBs' window.

The 'CACHE' window will appear.

The Cache PCB part location number is displayed in the title.

Cache Module ——— Status of the cache memory module (Displayed for each module group)

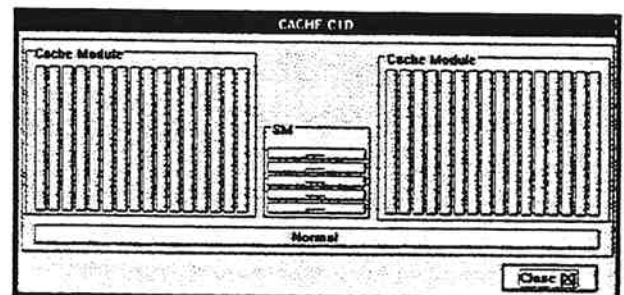
- Valid button : Normal
- Blinking '*' in the button : Failure
- '-' displayed in the button : Non-mounted

SM ——— Status of the shared memory module

- Valid button : Normal
- Blinking '*' in the button : Failure or under maintenance
- '-' displayed in the button : Non-mounted

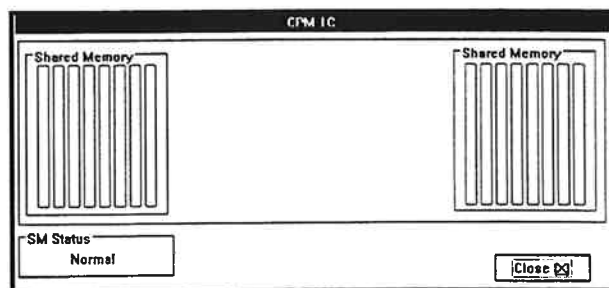
PCB Status ——— Status of this package

- Valid button : Normal
- Blinking button : Warning (abnormal)
- : Blocked (blocked for maintenance)
- : Failed (blocked due to a failure)
- : Cache Access Error (PCB blocked and CMG normal)



(b) Status of the PLC and PLT

Select (CL) [PLC] or [PLT] in the 'Logic PCBs' window. When the cache capacity is less than 4 GB, the displayed screen is the same as for the PLD or PLT. When the cache capacity is 4 GB or more, the 'Cache Port Master' window appears.



Shared Memory -- Status of shared memory

Valid button : Normal

Blinking '*' in the button : Failure or under maintenance

SM Status ----- Status of shared memory

• Normal

• Failed (blocked)

(c) Status of the PLE, PLF, PLQ, and PLR

Select (CL) [PLE], [PLF], [PLQ], or [PLR] in the 'Logic PCBs' window. The 'CHA' window will appear. The CHA part location number is displayed in the title.

CHPX-XX --- Status of program CHP in the CHA

Valid button : Normal

Blinking button : Failure

LCPXX ----- Status of program LCP or MCP
MCPXX in the LCM

Valid button : Normal

Blinking button : Failure

Invalid button : Non-mounted

PCB Status -- Status of the CHA package

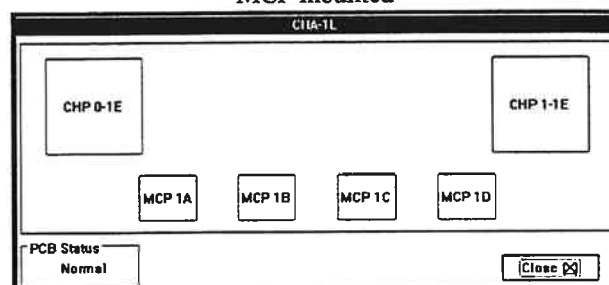
• Normal

• Warning (abnormal)

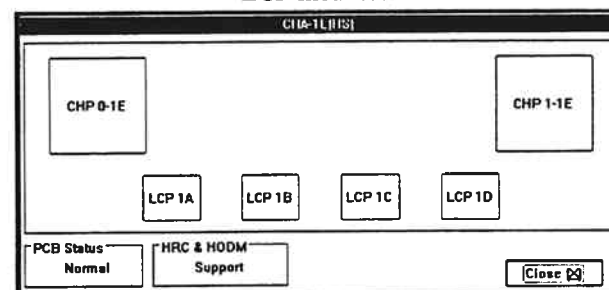
• Blocked (blocked for maintenance)

• Failed (blocked due to a failure)

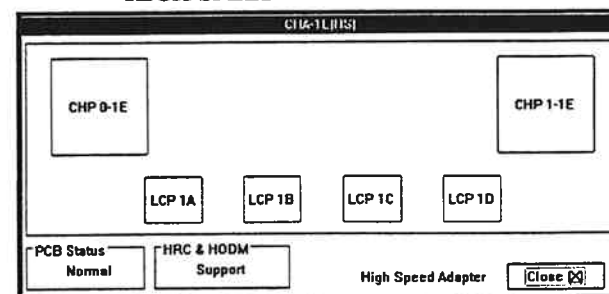
MCP mounted



LCP mounted



HIGH SPEED ADAPTER mounted



High Speed Adapter --- Display of high speed adapter.

HRC & HODM----- HRC & HODM potential of the CHA package.

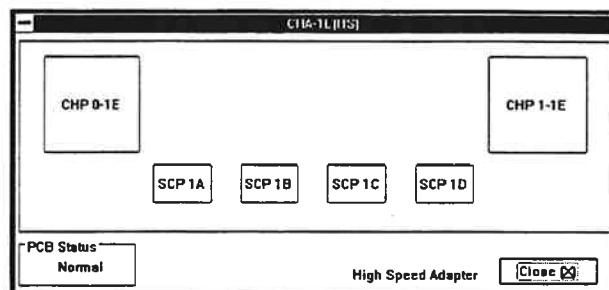
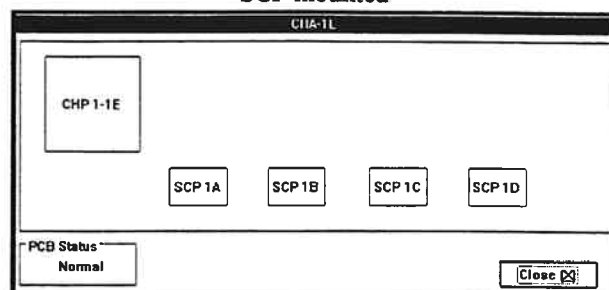
• Support

• Not support

• Unknown

SCP XX ----- Status of processor SCP in
 Valid button : Normal
 Blinking button : Failed or Blocked
 (status displayed under SCP button)
 Invalid button : Non-mounted

SCP mounted



(d) Status of the PLG to PLK or PLL to PLP

Select (CL) one of [PLG] to [PLK] or [PLL] to [PLP] in the 'Logic PCBs' window. The 'DKA' window will appear.

DKPX-XX -- Status of programs DMP and DSP in the DKA

Valid button : Normal

Blinking button : Failure or under maintenance

SCA-XXX --- Status of the SCA (No. 0 ~ 3)

SPC-XXX --- Status of the SPC (No. 1 ~ 4)

PCB Status -- Status of the DKA package

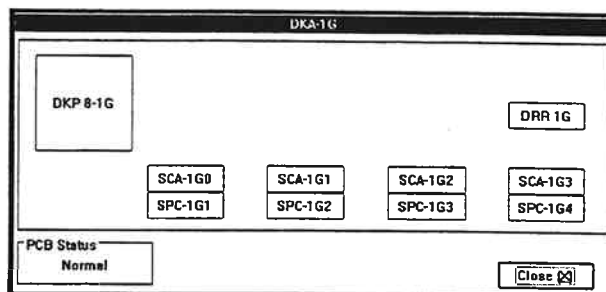
- Normal
- Warning (abnormal)
- Blocked (blocked for maintenance)
- Failed (blocked due to a failure)

DDR-XX ----- Status of DDR

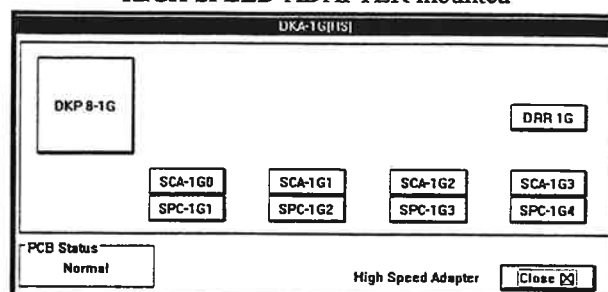
Valid button : Normal

Blinking button : Failure

High Speed Adapter --- Display of high speed adapter.



HIGH SPEED ADAPTER mounted



(9) Status of the Logic Box power supplies in the DKC

Select (CL) [P/S1] or [P/S2] in the 'DKC' window.

The power supply window will appear.

MPSn0 ----- Status of the basic power supply for the Logic Box

3VPSn0 Valid button : Normal

5VPSn0 Blinking button : Failure

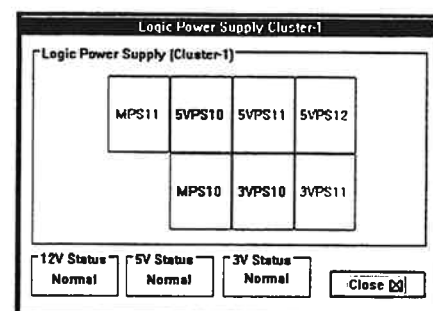
5VPSn1

MPSn1 ----- Status of the expanded power supply for the Logic Box

3VPSn1 Valid button : Normal

5VPSn2 Blinking button : Failure

Invalid button : Non-mounted



The number n is 1 for P/S1 or 2 for P/S2.

(10) Status of the buses in the DKC

Select (CL) [BUS] in the 'Logic Box' window.

The status of each bus will be displayed.

F-BUS/Low ----- Status of the F-BUS and M-BUS

F-BUS/High Valid button : Normal

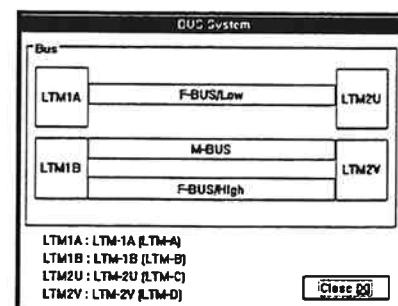
M-BUS Blinking button : Failure or under maintenance

LTM1A ----- Terminator (Only terminator names are displayed.)

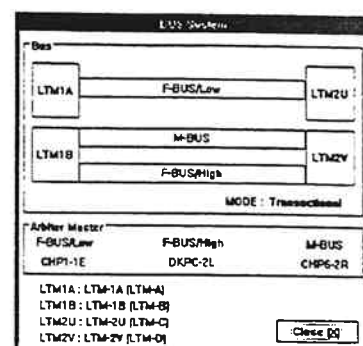
LTM1B

LTM2U

LTM2V



- MODE** ————— An action of the Bus
- "Transactional" : Transactional mode
 - "Sequential" : Sequential mode
 - "—————" : Not support
 - "Unknown" : Get information error
- ARBITER MASTER** A name of processor for each Bus Arbiter Master
- MP name : Arbiter Master MP
 - "None" : Arbiter Master MP not exist
 - "—————" : Not support
 - "Unknown" : Get information error



- * Status of Bus Mode and Bus Arbiter Master for each Bus status
- Six statuses exist as follows.

Bus status	Bus mode	Arbiter Master		
		F-BUS/L	F-BUS/H	M-BUS
Normal (1)	Transactional	Y	Y	Y
Normal (2)	Sequential	N	Y	Y
M-BUS failed	Sequential	Y	Y	N
F-BUS/L failed	Sequential	N	Y	Y
F-BUS/H failed	Sequential	Y	Y	N
F-BUS/H & M-BUS failed	Sequential	Y	N	N

Y : Arbiter Master MP exists

N : Arbiter Master MP not exist

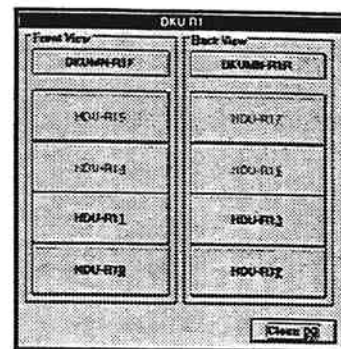
4.5.4 DKU

(1) Status of the DKU

Select (CL) [DKU-R1], [DKU-R2], [DKU-L1], or [DKU-L2] in the main screen.

The 'DKU' window will appear.

The DKU part location number is displayed in the title.



HDU-XX0 --- Status of the HDUs constituting the selected DKU

HDU-XX1 (Details are displayed on the lower layered screen.)

HDU-XX2 Valid button : Normal

HDU-XX3 Blinking button : Failure or under maintenance

HDU-XX4 or copy work in progress

HDU-XX5 Invalid button : Non-mounted

HDU-XX6

HDU-XX7

DKUMN-XXF ---- Status of DKU monitor

DKUMN-XXR Valid button : Normal

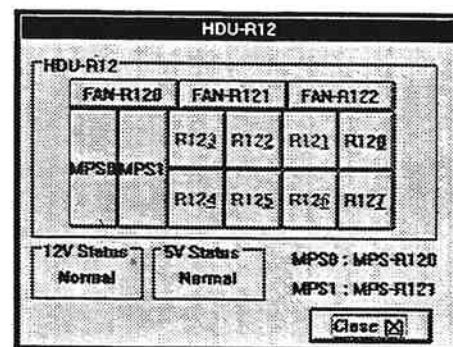
Blinking button : Failure

XX represents XX in DKU-XX: for example, R1 for DKU-R1 and L2 for DKU-L2.

(2) Status of the HDU

Select (CL) one of [H DU-XX0] to [H DU-XX7] in the 'DKU' window.

The 'HDU' window will appear.



YYY0 ----- Status of the HDDs constituting the HDU

YYY1	(Details are displayed on the lower layer
YYY2	screen.)

YYY3 Valid button : Normal

YYY4	Blinking button: PDEV error, failure, or
YYY5	under maintenance

YYY6 Blocked port Copy work in progress

YYY7 Invalid button : Non-mounted

"----"button : No information due to SVP-DKC error

MPS0 ----- Status of the HDU power supplies

MPS1	Valid button	: Normal
------	--------------	----------

Blinking button: Failure

"----"button : No information due to SVP-SSVP error

FAN-YYY0 ---- Status of the fans in the HDU

FAN-YYY1 Valid button : Normal

FAN-YYY2 Blinking button: Failure

" ---- "button : No information due to SVP-SSVP error

YYY represents YYY in HDU-YYY: when HDU-R12 is selected, for example, YYY is R12.

(3) Status of the HDD

Select (CL) one of [YYY0] to [YYY7] in the 'HDU' window.

The 'HDD' window will appear.

The HDD part location number is displayed in the title.

Device Type ----- Model name of the HDD

Group ----- Number of the parity group to which the HDD belongs (Note 1)

Logical Device ----- The involved logical devices are listed.

Device Status ----- The status of the HDD and the work name are displayed.

- Normal
- Correction Copy (xx%) (Note 2)
- Copy Back (xx%)
- Drive Copy (xx%)
- Dynamic Sparing (xx%)
- Blocked (blocked for maintenance)
- Failed (blocked due to failure)
- Warning (Either SCSI port is blocked.)
- Failed (Both SCSI ports are blocked.)
- Free (available spare disk.)
- Reserved (not available spare disk. The spare disk is reserved.)

During a copy operation, copy destination/copy source is displayed.

- to HDD-xx : Data is copied from this drive to HDD-xx.
- from HDD-xx : Data is copied from HDD-xx to this drive.

SCSI Port Status ----- SCSI port status

- Normal
- Warning (Port 0 failed): port 0 is blocked.
- Warning (Port 1 failed): port 1 is blocked.
- Failed: Both ports are blocked.

(Note 1) In RAID 0 method, Parity group consists of only one drive.

(Note 2) This system does not execute Correction Copy in RAID 0 method.

HDD-R120

Device Status Normal	Device Type DK306-45
SCSI Port Status Normal	Group Group 1 (RAID 5)
Logical Device LDEV 00-07	

Close

HDD-R120

Device Status Normal	Device Type DK306-45
SCSI Port Status Normal	Group Group 1-1 (RAID 5)
Logical Device LDEV 00-07	

Close

HDD-R120

Device Status Normal	Device Type DK308-90
SCSI Port Status Normal	Group Group 1-1 (RAID 5)
Logical Device 00 01 02 03 04 05 06 07 08 09 0a 0b 0c 0d 0e 0f	

Close

4.5.5 Copy status

- (1) Select (CL) [Copy Status] in the main screen.

The 'Copy Status' window will appear.

Copy Task — The operations of the drive copy currently running are listed.

Correction Copy to	HDD-XXXX	(Note 1)
Dynamic Sparing	HDD-XXXX->HDD-XXXX	
Copy Back	HDD-XXXX->HDD-XXXX	
Drive Copy	HDD-XXXX->HDD-XXXX	

Select (CL) one job item from the list. The following information concerning the selected job will be displayed:

Start ————— Date and time when the job started

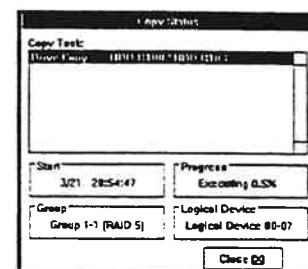
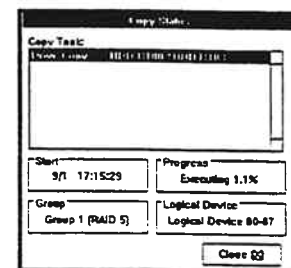
Parity Group — Number of the parity group to which the target drive belongs
(Note 2)

Progress ————— Degree of job progress (indicated in percent)

Logical Device — Logical Device in the target drive

(Note 1) This system does not execute Correction Copy in RAID 0 method.

(Note 2) In RAID 0 method, Parity group consists of only one drive.



4.5.6 Parity group

- (1) Select (CL) [Parity Group] in the main screen.

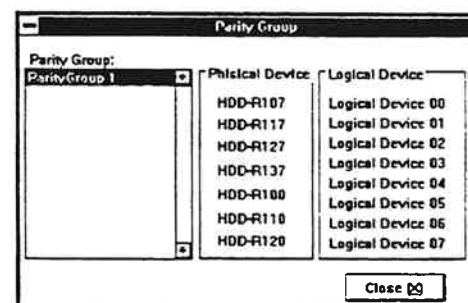
The 'Parity Group' window will appear.

Parity Group — List of mounted parity groups

Select (CL) a parity group from the list. The following information concerning the selected parity group will be displayed:

Physical Device — HDD number in the parity group

Logical Device — Logical Device number in the parity group



4.5.7 Logical devices

- (1) Select (CL) [Logical Device] in the main screen.

The 'Logical Device Status' window will appear.

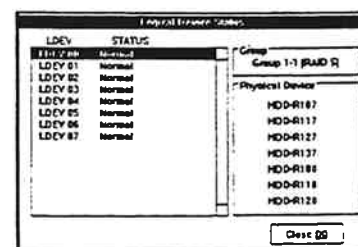
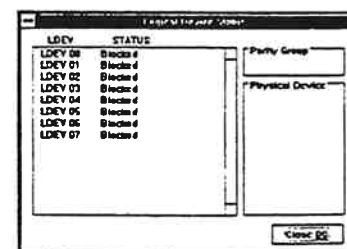
LDEV ————— List of the numbers of the mounted logical devices

Status ————— Status of the logical device

Select (CL) a logical device from the list. The following information concerning the selected logical device will be displayed:

Parity Group — Parity group to which the Logical Device belongs

Physical Device — Number of the HDD including the Logical Device



4.5.8 Micro-program version

Select (CL) [Version] from the main screen.

The message indicating that the version data of the micro-program currently running is being read is displayed, followed by the message indicating that the version data of the disk drive is read. Finally, the message indicating that the version data of the micro-program in the processor is being read is displayed.

Then, the 'Version Information' dialog box is displayed.

* Please do not change an application's window until SVP-DKC communication finish.

Version Information

Currently running Microprogram Version

Processor	LCPU	MCPU	LCMC	BOOT (RAM)
00-07-02-00/00	00-02-01	00-02-00	00-00-01	00-00-04

Stored Microprogram Version per Processor

MP No.	Processor	LCPU	MCPU	LCMC	BOOT (RAM)	BOOT (ROM)
001-10	00-07-02-00/00	00-02-00	00-00-01	00-00-04	01-00-00	0
001-10	00-07-02-00/00	00-02-00	00-00-01	00-00-04	01-00-00	0
001-10	00-07-02-00/00	00-02-01	00-00-01	00-00-04	01-00-00	0
001-10	00-07-02-00/00	00-02-01	00-00-01	00-00-04	01-00-00	0

SVP (RENEW)

Program Version

Processor	LCPU	MCPU	LCMC	CODECIC	BOOT (RAM)	SVP	S-VP	CODEC4
01-00-01-00/01	00-00-10	00-00-10	00-00-10	00-00-10	00-00-10	01-00-01	01-00-01	00-00-10

Backup Program Version

Processor	LCPU	MCPU	LCMC	CODECIC	BOOT (RAM)	SVP	S-VP	CODEC4
01-00-01-00/01	00-00-10	00-00-10	00-00-10	00-00-10	00-00-10	01-00-01	01-00-01	00-00-10

OK

OR

Version Information

Currently running Microprogram Version

Processor	LCPU	MCPU	LCMC	BOOT (RAM)
00-07-02-00/00	00-02-01	00-02-00	00-00-01	00-00-04

Stored Microprogram Version per Processor

MP No.	Processor	LCPU	MCPU	LCMC	BOOT (RAM)	BOOT (ROM)
001-10	00-07-02-00/00	00-02-00	00-00-01	00-00-04	01-00-00	0
001-10	00-07-02-00/00	00-02-00	00-00-01	00-00-04	01-00-00	0
001-10	00-07-02-00/00	00-02-01	00-00-01	00-00-04	01-00-00	0
001-10	00-07-02-00/00	00-02-01	00-00-01	00-00-04	01-00-00	0

SVP (RENEW)

Program Version

Processor	LCPU	MCPU	LCMC	CODECIC	BOOT (RAM)	SVP	S-VP	CODEC4
01-00-01-00/01	00-00-10	00-00-10	00-00-10	00-00-10	00-00-10	01-00-01	01-00-01	00-00-10

Backup Program Version

Processor	LCPU	MCPU	LCMC	CODECIC	BOOT (RAM)	SVP	S-VP	CODEC4
01-00-01-00/01	00-00-10	00-00-10	00-00-10	00-00-10	00-00-10	01-00-01	01-00-01	00-00-10

OK

DISK SUBSYSTEM area : Displays the version of the currently running micro-program.

- Representative version
- Version of each processor

SVP area : Displays the version of the micro-program saved in the SVP.

- Latest version in the SVP
- Old version in the SVP

DKU area

- Drive version (There is a case that DKU area is displayed on the DISK SUBSYSTEM area.)

In the version display areas, a hyphen "-" indicates that micro-program is not installed.

In the version display areas, a question mark "?" indicates that version data could not be obtained while the letter "x" indicates that the obtained data is invalid.

If the version of the PCB which has already been installed is displayed as "x", please exchange the micro-code corresponding to "x" by micro FC (refer to MICRO-FC SECTION 5.4.4 Hard Disk Download (MICRO-FC04-85)).

To obtain new version data, select (CL) [RENEW]. The contents of the display will be updated accordingly.

To quit the version display, select (CL) [OK]. This will take you back to the main screen.

[1] DISK SUBSYSTEM area

DISK SUBSYSTEM						
Currently running Microprogram Version						
DKUMAIN	LCP	MCP	LCBG	BOOT (RAM)		
00-07-02-00/00	00-03-01	00-02-00	00-00-01	00-00-04		
Stored Microprogram Version per Processor						
MP No.	DKUMAIN	LCP	MCP	LCBG	BOOT (RAM)	BOOT (ROM)
MP0-1E	00-07-02-00/00	-----	00-02-00	00-00-01	00-00-04	01-00-05
MP1-1E	00-07-02-00/00	-----	00-02-00	00-00-01	00-00-04	01-00-05
MP2-1F	00-07-02-00/00	00-03-01	-----	00-00-01	00-00-04	01-00-04
MP3-1F	00-07-02-00/00	00-03-01	-----	00-00-01	00-00-04	01-00-04

DKU
 Current (ROM-RAM)
 D3-E8 ↑
 D3-E6 ↓
 SVP (RAM)
 00-00-E1
 Backup (RAM)
 00-00-E1

(1) Representative version and version for each processor

The Currently running Micro-program Version area displays the representative version of micro-program currently running.

The Stored Micro-program Version per Processor area displays the version of the currently running micro-program for each processor.

A micro-program is divided into six items: MAIN, LCP, MCP, LCDG, BOOT (RAM), BOOT (ROM). The version of MAIN is displayed in the form of VV-RR-NN-PP/nn. The other versions are displayed in the form of VV-RR-NN.

The representative version may be displayed in reverse video. This display indicates that there is a processor version that does not match the representative version. The processor displayed in reverse video in the Stored Micro-program Version per Processor area is the one that caused a mismatch. An asterisk "*" in front of a version number indicates the mismatching item in the mismatching processor.

There is a case that DKU area is displayed on the lower half of 'Version Information' dialog box.

DISK SUBSYSTEM						
Currently running Microprogram Version						
DKUMAIN	LCP	MCP	LCBG	BOOT (RAM)		
00-07-02-00/00	00-03-01	00-02-00	00-00-01	00-00-04		
Stored Microprogram Version per Processor						
MP No.	DKUMAIN	LCP	MCP	LCBG	BOOT (RAM)	BOOT (ROM)
MP0-1E	00-07-02-00/00	-----	00-02-00	00-00-01	00-00-04	01-00-05
MP1-1E	00-07-02-00/00	-----	00-02-00	00-00-01	00-00-04	01-00-05
MP2-1F	*00-07-02-00/01	00-03-01	-----	00-00-01	00-00-04	01-00-04
MP3-1F	00-07-02-00/00	00-03-01	-----	00-00-01	00-00-04	01-00-04

DKU
 Current (ROM-RAM)
 D3-E8 ↑
 D3-E6 ↓
 SVP (RAM)
 00-00-E1
 Backup (RAM)
 00-00-E1

(2) Patch status display

Select the (DC) one line from the list in the Stored Micro-program Version per Processor area on the 'Version Information' dialog box.

'Patch Map' dialog box will be displayed, showing the patch status for the target processor.

MP No — Processor ID

All Map — List of all maps. All maps in the FM and SVP are displayed. When a match is not found between a map in the FM and the corresponding map in the SVP, an asterisk "*" is displayed between them.

Difference Map — Only the maps which do not provide a match between the FM and SVP in All Map.

Patch Map

MP No: **CHP0-1E**

All Map	
FM	SVP
00-1 *	00-0
01-0	01-0
02-1 *	02-0
03-0	03-0
04-0	04-0
05-0	05-0
06-0	06-0
07-0	07-0
08-0	08-0
09-0	09-0
0A-0	0A-0
0B-0	0B-0
0C-0	0C-0

Difference Map	
FM	SVP
00-1 *	00-0
02-1 *	02-0

OK

The example on the right shows that, in processor CHP0-1E, the contents for patch ID numbers 00 and 02 are contained in the flash memory (FM) but not in the SVP.

To quit the patch status map display, select (CL) [OK].

(3) Drive version

The DKU area on the 'Version Information' dialog box lists drive versions as ROM Version-RAM Version.

Type : Types of drives currently running (DKxxx).

Current : Version of micro-program currently running.

SVP : New version of micro-program stored in SVP hard disk. (00-00-RAM Version)

Backup : Old version of micro-program stored in SVP hard disk. (00-00-RAM Version)

DKU

Current (ROM-RAM)

D3-E8 ↑

D3-E6 ↓

SVP (RAM)

00-00-E1

Backup (RAM)

00-00-E1

OR

DKU

Current Type (ROM-RAM)

DK306 D3-E8 ↑

DK306 D3-E6

DK306 XX-XX ↓

SVP Type (RAM)

DK306 00-00-E8

DK308 00-00-EA

Backup Type (RAM)

DK306 00-00-E6

DK308 00-00-F9

(4) Drive name display

Select (DC) one line from the list in the DKU area on the 'Version Information' dialog box. The 'DKU List' dialog box will be displayed, in which the drive identified by the version are listed.

Drive Type — Types of drives identified by the selected version.

Version — Selected version

DKU ID — List of IDs of the drives identified by the selected version.

To quit 'Drive List', select (CL) [OK].

DKU List

Version: **D3-E6**

DKU ID

KDB-E107

KDB-E108

KDB-E117

KDB-E119

KDB-E127

KDB-E128

KDB-E137

OK

OR

DKU List

Drive Type: **DK306**

Version: **D3-E8**

DKU ID

KDB-E107

KDB-E108

KDB-E117

KDB-E119

KDB-E127

KDB-E128

KDB-E137

OK

[2] SVP area

SVP								
Program Version								
DECMAN	LCP	MCP	LCDG	CONFIG	BOOT (RAM)	SVP	S-SVP	CUDG4
01-00-01-30/01	00-00-10	00-00-10	00-00-10	00-04-04/00	00-00-10	01-00-01/00	XX-XX-XX	00-00-10
Backup Program Version								
DECMAN	LCP	MCP	LCDG	CONFIG	BOOT (RAM)	SVP	S-SVP	CUDG4
01-00-01-30/01	00-00-10	00-00-10	00-00-10	-----/--	00-00-10	XX-XX-XX/XX	XX-XX-XX	00-00-10

OR

SVP		Backup Program Version	
Program Version			
01-00-01-30/01	DECMAN	01-00-01-30/01	
00-00-10	LCP	00-00-10	
00-00-10	MCP	00-00-10	
00-00-10	LCDG	00-00-10	
01-05-03/00	CONFIG	-----/--	
-----	BOOT (RAM)	00-00-10	
01-00-01/00	SVP	XX-XX-XX/XX	
XX-XX-XX	S-SVP	XX-XX-XX	
??-??-??	CUDG4	00-00-10	

This area displays the versions of two generations (previous and most recent) of micro-programs saved on the SVP hard disk. Each micro-program is divided into nine items: MAIN, LCP, MCP, LCDG, CONFIG, BOOT (RAM), SVP, S-SVP, and CUDG4. The version of MAIN is displayed in the form of VV-RR-NN-PP/nn while that of SVP, CONFIG is displayed in the form of VV-RR-NN/nn. The other versions are displayed in the form of VV-RR-NN.

Program Version ----- The latest version is displayed.

Backup Program Version ---- The old version is displayed.

4.5.9 LCP/MCP Path

Select (CL) [LCP/MCP Path] from the main screen.

The message shown on the right is displayed while the SVP is reading path information from the DKC.

Wait...

Upon completion of reading the path information, the LCP/MCP Path screen is displayed for selecting the physical or logical path.

* Please do not change window until SVP-DKC communication finish.

LCP/MCP Path

Physical Path

Logical Path

Close

(1) Physical Path

Select (CL) [Physical Path] in the screen.

The 'Physical Path Status' window will appear.

LCPxx/RCPxx/MCPxx --- LCP/RCP/MCP mount position

LINK ADDR

Self ----- LCP/RCP/MCP link address
Destination ----- Connection destination (host) link address

NODE ID (HOST)

STATUS ----- Node ID obtainment status
TYPE/MODEL ----- Connection destination type/model name
SEQNUMBER ----- Connection destination production number
TAG ----- Connection destination tag

Physical Path Status

LINK ADDR	Self	Destination	NODE ID (HOST)	STATUS	TYPE/MODEL	SEQNUMBER	TAG
MCP1A							
MCP1B							
MCP1C							
MCP1D							
MCP1E							
MCP1F	0200	0100	INVALID	VALID(CUR)	003990/006	00000000030155	001C
MCP2A							
MCP2B							
MCP2C							
MCP2D							
MCP2E	0100	0200	VALID(CUR)	003990/006	00000000030155	0000	0000
MCP2F	0200	0100	VALID(CUR)	003990/210	01000000015004		0026

Close

To exit the display, press [Close].

(2) Logical Path

Select (CL) [Logical Path] in the screen.

The 'Logical Path Status' window will appear.

PT# ----- Path number

NODE ----- LCPxx : LCP to which the logical path is allocated
RCPxx : RCP to which the logical path is allocated.
CLSW : Metal channel
NU : Unused logical path

LINK ----- Link address of the connected host
"NA" is displayed when the metal channel is specified.

LGCL ----- Logical address of the connected host
A blank is displayed when the metal channel is specified.

Logical Path Status

PT#	NODE	LINK	LGCL
00	LCP1A	01	00
01	NU		
02	NU		
03	NU		
04	NU		
05	NU		
06	NU		
07	NU		
08	NU		
09	NU		
0A	NU		
0B	NU		
0C	NU		
0D	NU		
0E	NU		
0F	NU		

Close

Since data can be displayed only in 16 rows within a screen, use the scroll bar to display data not included in the screen.

To exit the display, press [Close].

4.5.10 RAID Status Display

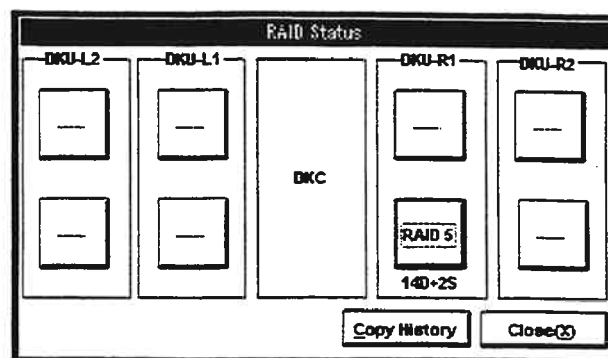
Select (CL) [RAID Status] in the main screen.

The "RAID Status" screen appears.

For DKU-L1 and DKU-L2, status of each B4 is shown on the left side of the screen. For DKU-R1 and DKU-R2, status of each B4 is shown on the right side.

* DKU is divided into upper and lower sections.

B4 indicates either of these sections.



Selecting [Copy History] displays the "Copy History" screen showing the copy history.

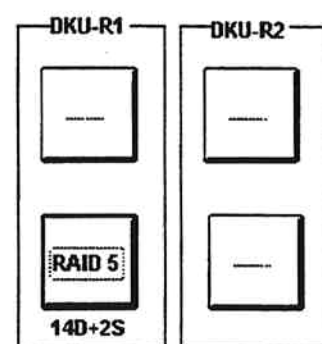
Selecting [Close] clears the "RAID Status" screen.

(1) B4 status display

RAID level settings for each B4 are shown in the DKU fields in the "RAID Status" screen. If B4 is installed, the RAID level is shown on the button for that B4. The drive configuration is shown under the button. This configuration has the format "Data drive count + Spare drive count" (e.g., 14D + 2S).

If B4 is installed with only spare drives, there is no word on the button for that B4.

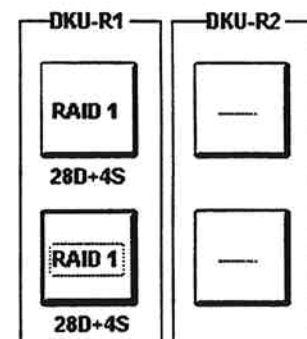
If B4 is not installed, there is "—" on the button for that B4.



example 1

In the example 1 on the right, lower B4 of DKU-R1 is installed. For this B4, the RAID level is RAID5, the data drive count is 14, and the spare drive count is 2. Upper B4 of DKU-R1 and DKU-R2 B4s are not installed.

In the example 2 on the right, lower B4 of DKU-R1 is installed. For this B4, the RAID level is RAID1, the data drive count is 28, and the spare drive count is 4. Upper B4 of DKU-R1 is installed. DKU-R2 B4s are not installed.



example 2

(2) Group status display

If you select (CL) the button which indicates the RAID level for B4 in the "RAID Status" screen, either the "RAID5" screen appears depending on the RAID level. The number of groups assigned to selected B4 is shown. Also the LDEV number and spare drive status for each group are shown.

The vertically displayed buttons in the "RAID5" screen are available for representing groups. Under these buttons, the horizontally displayed buttons are available for representing spare drives.

RAID 5			
--	--	08-0F	00-07
Spare	Spare	---	---
Close(X)			

In the "RAID1" screen, the rectangular buttons displayed at bottom of the most left row, are available for representing spare drives. Other rectangular buttons and the square ones are available for representing groups.

RAID 1							
Spare	1A,52	16,4E	12,4A	0E,46	0A,42	06,3E	02,3A
Spare	18,50	14,4C	10,48	0C,44	08,40	04,3C	00,38
Close(X)							

If a group is installed, the LDEV numbers are shown on the button

for the group. If a group is not installed, there is "-----" on the button for the group.

If a spare drive is installed, there is "Spare" on the button for the spare drive. If a spare drive is not installed, there is "-----" on the button for the spare drive.

Selecting [Close] clears the "RAID5" or "RAID1" screen.

(3) LDEV status display

If you select (CL) a button on which an LDEV number or "Spare" is displayed in the "RAID5" or "RAID1" screen, the "LDEV" or "Spare" screen appears.

If you selected a button for a group, the LDEV number and status of the group are displayed. ID of the associated drive is also displayed.

Selecting [Close] clears the "LDEV" screen.

If you selected a button for a spare drive, ID of the spare drive is displayed.

Selecting [Close] clears the "Spare" screen.

① RAID5

LDEV		ED
No.	Status	
01	Normal	R107
02	Normal	R117
03	Normal	R127
04	Normal	R137
05	Normal	R147
06	Normal	R157
07	Normal	R167

Close(X)

LDEV		ED
No.	Status	
-- Spare --		R138

Close(X)

Group 1-1		ED	Type
No.	Status		
01	Locked	R107	HC300-90
02	Locked	R117	HC300-90
03	Locked	R127	HC300-90
04	Locked	R137	HC300-90
05	Locked	R147	HC300-90
06	Locked	R157	HC300-90
07	Locked	R167	HC300-90
08	Locked	R177	HC300-90
09	Locked	R187	HC300-90
10	Locked	R197	HC300-90
11	Locked	R207	HC300-90
12	Locked	R217	HC300-90
13	Locked	R227	HC300-90
14	Locked	R237	HC300-90
15	Locked	R247	HC300-90
16	Locked	R257	HC300-90
17	Locked	R267	HC300-90
18	Locked	R277	HC300-90
19	Locked	R287	HC300-90
20	Locked	R297	HC300-90
21	Locked	R307	HC300-90
22	Locked	R317	HC300-90
23	Locked	R327	HC300-90
24	Locked	R337	HC300-90
25	Locked	R347	HC300-90
26	Locked	R357	HC300-90
27	Locked	R367	HC300-90
28	Locked	R377	HC300-90
29	Locked	R387	HC300-90
30	Locked	R397	HC300-90
31	Locked	R407	HC300-90
32	Locked	R417	HC300-90
33	Locked	R427	HC300-90
34	Locked	R437	HC300-90
35	Locked	R447	HC300-90
36	Locked	R457	HC300-90
37	Locked	R467	HC300-90
38	Locked	R477	HC300-90
39	Locked	R487	HC300-90
40	Locked	R497	HC300-90
41	Locked	R507	HC300-90
42	Locked	R517	HC300-90
43	Locked	R527	HC300-90
44	Locked	R537	HC300-90
45	Locked	R547	HC300-90
46	Locked	R557	HC300-90
47	Locked	R567	HC300-90
48	Locked	R577	HC300-90
49	Locked	R587	HC300-90
50	Locked	R597	HC300-90
51	Locked	R607	HC300-90
52	Locked	R617	HC300-90
53	Locked	R627	HC300-90
54	Locked	R637	HC300-90
55	Locked	R647	HC300-90
56	Locked	R657	HC300-90
57	Locked	R667	HC300-90
58	Locked	R677	HC300-90
59	Locked	R687	HC300-90
60	Locked	R697	HC300-90
61	Locked	R707	HC300-90
62	Locked	R717	HC300-90
63	Locked	R727	HC300-90
64	Locked	R737	HC300-90
65	Locked	R747	HC300-90
66	Locked	R757	HC300-90
67	Locked	R767	HC300-90
68	Locked	R777	HC300-90
69	Locked	R787	HC300-90
70	Locked	R797	HC300-90
71	Locked	R807	HC300-90
72	Locked	R817	HC300-90
73	Locked	R827	HC300-90
74	Locked	R837	HC300-90
75	Locked	R847	HC300-90
76	Locked	R857	HC300-90
77	Locked	R867	HC300-90
78	Locked	R877	HC300-90
79	Locked	R887	HC300-90
80	Locked	R897	HC300-90
81	Locked	R907	HC300-90
82	Locked	R917	HC300-90
83	Locked	R927	HC300-90
84	Locked	R937	HC300-90
85	Locked	R947	HC300-90
86	Locked	R957	HC300-90
87	Locked	R967	HC300-90
88	Locked	R977	HC300-90
89	Locked	R987	HC300-90
90	Locked	R997	HC300-90
91	Locked	R1007	HC300-90
92	Locked	R1017	HC300-90
93	Locked	R1027	HC300-90
94	Locked	R1037	HC300-90
95	Locked	R1047	HC300-90
96	Locked	R1057	HC300-90
97	Locked	R1067	HC300-90
98	Locked	R1077	HC300-90
99	Locked	R1087	HC300-90
100	Locked	R1097	HC300-90
101	Locked	R1107	HC300-90
102	Locked	R1117	HC300-90
103	Locked	R1127	HC300-90
104	Locked	R1137	HC300-90
105	Locked	R1147	HC300-90
106	Locked	R1157	HC300-90
107	Locked	R1167	HC300-90
108	Locked	R1177	HC300-90
109	Locked	R1187	HC300-90
110	Locked	R1197	HC300-90
111	Locked	R1207	HC300-90
112	Locked	R1217	HC300-90
113	Locked	R1227	HC300-90
114	Locked	R1237	HC300-90
115	Locked	R1247	HC300-90
116	Locked	R1257	HC300-90
117	Locked	R1267	HC300-90
118	Locked	R1277	HC300-90
119	Locked	R1287	HC300-90
120	Locked	R1297	HC300-90
121	Locked	R1307	HC300-90
122	Locked	R1317	HC300-90
123	Locked	R1327	HC300-90
124	Locked	R1337	HC300-90
125	Locked	R1347	HC300-90
126	Locked	R1357	HC300-90
127	Locked	R1367	HC300-90
128	Locked	R1377	HC300-90
129	Locked	R1387	HC300-90
130	Locked	R1397	HC300-90
131	Locked	R1407	HC300-90
132	Locked	R1417	HC300-90
133	Locked	R1427	HC300-90
134	Locked	R1437	HC300-90
135	Locked	R1447	HC300-90
136	Locked	R1457	HC300-90
137	Locked	R1467	HC300-90
138	Locked	R1477	HC300-90
139	Locked	R1487	HC300-90
140	Locked	R1497	HC300-90
141	Locked	R1507	HC300-90
142	Locked	R1517	HC300-90
143	Locked	R1527	HC300-90
144	Locked	R1537	HC300-90
145	Locked	R1547	HC300-90
146	Locked	R1557	HC300-90
147	Locked	R1567	HC300-90
148	Locked	R1577	HC300-90
149	Locked	R1587	HC300-90
150	Locked	R1597	HC300-90
151	Locked	R1607	HC300-90
152	Locked	R1617	HC300-90
153	Locked	R1627	HC300-90
154	Locked	R1637	HC300-90
155	Locked	R1647	HC300-90
156	Locked	R1657	HC300-90
157	Locked	R1667	HC300-90
158	Locked	R1677	HC300-90
159	Locked	R1687	HC300-90
160	Locked	R1697	HC300-90
161	Locked	R1707	HC300-90
162	Locked	R1717	HC300-90
163	Locked	R1727	HC300-90
164	Locked	R1737	HC300-90
165	Locked	R1747	HC300-90
166	Locked	R1757	HC300-90
167	Locked	R1767	HC300-90
168	Locked	R1777	HC300-90
169	Locked	R1787	HC300-90
170	Locked	R1797	HC300-90
171	Locked	R1807	HC300-90
172	Locked	R1817	HC300-90
173	Locked	R1827	HC300-90
174	Locked	R1837	HC300-90
175	Locked	R1847	HC300-90
176	Locked	R1857	HC300-90
177	Locked	R1867	HC300-90
178	Locked	R1877	HC300-90
179	Locked	R1887	HC300-90
180	Locked	R1897	HC300-90
181	Locked	R1907	HC300-90
182	Locked	R1917	HC300-90
183	Locked	R1927	HC300-90
184	Locked	R1937	HC300-90
185	Locked	R1947	HC300-90
186	Locked	R1957	HC300-90
187	Locked	R1967	HC300-90
188	Locked	R1977	HC300-90
189	Locked	R1987	HC300-90
190	Locked	R1997	HC300-90
191	Locked	R2007	HC300-90
192	Locked	R2017	HC300-90
193	Locked	R2027	HC300-90
194	Locked	R2037	HC300-90
195	Locked	R2047	HC300-90
196	Locked	R2057	HC300-90
197	Locked	R2067	HC300-90
198	Locked	R2077	HC300-90
199	Locked	R2087	HC300-90
200	Locked	R2097	HC300-90
201	Locked	R2107	HC300-90
202	Locked	R2117	HC300-90
203	Locked	R2127	HC300-90
204	Locked	R2137	HC300-90
205	Locked	R2147	HC300-90
206	Locked	R2157	HC300-90
207	Locked	R2167	HC300-90
208	Locked	R2177	HC300-90
209	Locked	R2187	HC300-90
210	Locked	R2197	HC300-90
211	Locked	R2207	HC300-90
212	Locked	R2217	HC300-90
213	Locked	R2227	HC300-90
214	Locked	R2237	HC300-90
215	Locked	R2247	HC300-90
216	Locked	R2257	HC300-90
217	Locked	R2267	HC300-90
218	Locked	R2277	HC300-90
219	Locked	R2287	HC300-90
220	Locked	R2297	HC300-90
221	Locked	R2307	HC300-90
222	Locked	R2317	HC300-90
223	Locked	R2327	HC300-90
224	Locked	R2337	HC300-90
225	Locked	R2347	HC300-90
226	Locked	R2357	HC300-90
227	Locked	R2367	HC300-90
228	Locked	R2377	HC300-90
229	Locked	R2387	HC300-90
230	Locked	R2397	HC300-90
231	Locked	R2407	HC300-90
232	Locked	R2417	HC300-90
233	Locked	R2427	HC300-90
234	Locked	R2437	HC300-90
235	Locked	R2447	HC300-90
236	Locked	R2457	HC300-90
237	Locked	R2467	HC300-90
238	Locked	R2477	HC300-90
239	Locked	R2487	HC300-90
240	Locked	R2497	HC300-90
241	Locked	R2507	HC300-90
242	Locked	R2517	HC300-90
243	Locked	R2527	HC300-90
244	Locked	R2537	HC300-90
245	Locked	R2547	HC300-90
246	Locked	R2557	HC300-90
247	Locked	R2567	HC300-90
248	Locked	R2577	HC300-90
249	Locked	R2587	HC300-90
250	Locked	R2597	HC300-90
251	Locked	R2607	HC300-90
252	Locked	R2617	HC300-90

(4) Copy History display

Selecting (CL) [Copy History] in the "RAID Status" screen displays the "Copy History" screen.

Copy History							
No	Req	Process	Start	End	HDD Src -- Dst	End Status	
1	Fail	Dynamic sparing	95/09/26 19:47:46	*****	R105-R103	Running	
2	SVP	Copy back	95/09/25 18:36:02	95/09/26 00:06:23	R130-R144	Complete	
3	SVP	Copy back	95/09/25 16:13:05	95/09/25 18:22:12	R112-R110	Incomplete	
4	SVP	Copy back	95/09/25 11:08:00	95/09/25 14:55:00	R170-R117	Complete	
5	SVP	Self Correction	95/09/22 16:13:23	95/09/22 20:10:32	R147-R147	Warning	
6	SVP	Copy back	95/09/22 15:25:46	95/09/22 15:31:10	R143-R147	Suspend	
7	Fail	Dynamic sparing	95/09/22 13:00:36	95/09/22 14:39:27	R117-R170	Complete	
8	Fail	Other Correction	95/09/22 08:53:32	95/09/22 11:33:33	R110-R112	Complete	
9	Fail	Dynamic sparing	95/09/22 08:27:39	95/09/22 10:19:10	R144-R130	Complete	
10	Fail	Dynamic sparing	95/09/22 08:24:02	95/09/22 10:23:48	R147-R143	Complete	
11	Fail	Other Correction	95/09/21 11:30:07	95/09/21 13:06:04	R165-R161	Suspend	
12	SVP	Copy back	95/09/21 11:20:04	95/09/21 13:05:22	R143-R144	Suspend	
13	Fail	Dynamic sparing	95/09/20 19:40:54	95/09/20 22:37:07	R144-R143	Complete	
14	SVP	Self Correction	95/09/20 19:37:40	95/09/20 22:50:50	R106-R106	Complete	
15	SVP	Self Correction	95/09/20 14:10:37	95/09/20 17:28:30	R117-R117	Complete	
16	Fail	Other Correction	95/09/20 11:31:53	95/09/20 11:52:09	R151-R152	Suspend	

The "Copy History" screen shows the history of RAID Copy.

No ----- Serial number of a log. Numbering starts from 1 for the newest log.

Req ----- Device which requested a copy

Fail : Failed device

SVP: SVP

Process ----- Type of copy

Drive copy : The process of drive content copying by SVP.

Dynamic Sparing : The process of drive content copying (Drive Copy) to a spare drive before the drive is blocked.

Self Correction : The process of drive recovery by correction copy execution when the drive is blocked and replaces.

Other Correction : Correction copy (CC) of the drive content to a spare drive.

Copy back : Data drive content saved in the spare drive copied back (Drive copy) to the drive at the original location.

Start ----- Logging start time ("*****" appears if the first log is not found.)

End ----- Logging end time ("*****" appears if the last log is not found.)

HDD-Src ----- Source HDD name ("*****" appears if the obtained log data is invalid HDD part location number.)

HDD-Dst ----- Destination HDD name ("*****" appears if obtained log data is invalid HDD part location number.)

End Status ----- End status

Complete : Normal termination

Incomplete : Abnormal termination

Suspend : Copying is suspended.

Warning : Normal termination (with a warning)

Running : Copying is underway.

The line which indicates abnormal termination is displayed in reverse video.

Selecting (CL) [Close] redisplay the "RAID Status" screen.

4.5.11 SCSI PATH Status

- (1) Select (CL) [SCSI Path] in the main screen.
The 'SCSI Path-LDEV Configuration' window will appear.

(a) <SCSI PATH> section

Path display----- List of defined SCSI Path.

[PORT] ----- Sorts path items in the SCSI Path display

[SCSI ID] section in ascending order by PORT,

[LUN] SCSI ID, LUN or LDEV.

[LDEV]

(b) <SCSI PATH REFERENCE> section

PORT display----- Displays the ports which are able to be
defined SCSI Path.

FREE SCSI ID display ----Displays the SCSI ID not used with the port selected in PORT display.

FREE LDEV----- Displays the LDEV ID of an undefined path.

(c) <HOST MODE> section

MODE-PORT list----- Host identification data defined to the ports installed.

MODE	PORT
MODE 00	CL1-F
	CL1-G
	CL1-M
	CL1-N
	CL2-F
	CL2-G
	CL2-M
	CL2-N
MODE 01	CL1-E
	CL2-E

SCSI PATH	PORT	SCSI ID	LUN	LDEV
CL1-E	0	0	00	
CL1-M	1	1	01	
CL2-E	2	2	02	
CL2-M	3	3	03	

Sort: [PORT] [SCSI ID] [LUN] [LDEV] [Clear]

PORT	FREE SCSI ID	FREE LDEV
CL1-F	1 2 3	04
CL1-G	4 5 6 7	05
CL1-M	8 9 A B	06
CL1-N	C D E F	07
CL2-F		08
CL2-G		09
CL2-M		10
CL2-N		11

4.6 Error or Failure Status Action

When an error status of, Warning, Failed, or other is displayed on the screen and action is required, locate the part in error and follow the instructions according to the action code (ACC). The ACC can be obtained by executing the SSB log or SIM log displayed function of the SVP.