RAID Array 210 Storage Subsystem





PLEASE READ before installing this equipment!

This includes the following parts:

SWXCR-EA and -EB
KZESC-AA and -BA
SWIRA-BA and - BB
SWIKX-BA and -BB
FR-PCTAR-AA and -CA

A problem has recently been identified with the RAID Array 210 subsystem. This problem is unique to the RAID Array 210 subsystem fault management and occurs only under a certain combination of conditions. Note that the problem does not affect any other StorageWorks Subsystems.

The cause of the problem is an interaction between the RAID Array 210 fault management circuit, the SCSI connector on the storage enclosure backplane, and a diode in the disk drive carrier flex circuit. If multiple conditions are true, a small percentage of the subsystems might not automatically rebuild after replacement of a disk drive. If a user remains unaware and does not initiate a manual rebuild process, a follow-on drive failure could conceivably result in data loss. The attached procedure defines how to avoid that unlikely consequence.

NOTE

Any Array 210/enclosure/disk carrier combination shipped with this letter has been verified and does not have the problem. If you integrate additional enclosure/drive carrier components with the Array 210, you should follow the attached procedure to ensure proper rebuild of your RAID array.

Printed in U.S.A. (11/94) Copyright 1994, Digital Equipment Corporation. All Rights Reserved. EK-SM1CF-PN. A01

StorageWorks™ is a trademark of Digital Equipment Corporation.

Digital Equipment Corporation does not warrant that predicted values represent any particular unit installed for customer use. The actual values may vary from unit to unit. These specifications are subject to change without notice. Digital is not responsible for inadvertent errors.

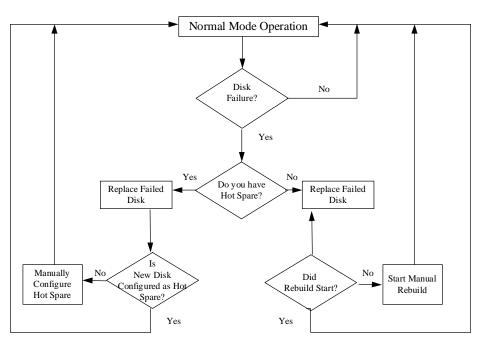
Remedial Procedure

Check the monitor to determine if you have had a disk drive failure -this is indicated on the monitor and the amber LED on the disk drive SBB. If you have had a disk drive failure while running in RAID 1, 0+1, or 5 configurations, take one of the following actions:

IF YOU HAVE A HOT SPARE DISK DRIVE AS PART OF YOUR CONFIGURATION, the rebuild of the Logical RAID Drive will begin and complete on the hot spare. This should happen automatically in all cases. You can use the monitor to verify successful completion.

Remove the failed disk drive and insert the replacement disk drive. The replacement should automatically become the new hot spare. Verify this via the monitor. If the replacement disk drive has not been automatically configured as a hot spare, you must manually configure it. Refer to the User's Guide on how to perform this procedure.

IF YOU DO NOT HAVE A HOT SPARE DISK DRIVE AS PART OF YOUR <u>CONFIGURATION</u>, remove the failed disk drive and insert the replacement disk drive. At this point, the controller should automatically start a logical drive rebuild on the replacement disk drive. If the rebuild does not occur, you must manually initiate the rebuild of the replacement disk drive. Refer to the User's Guide on how to perform this procedure.



RAID Array 210 Remedial Procedure

STANDARD OPERATING PROCEDURE FOR ALL STORAGEWORKS SUBSYSTEMS SHOULD BE TO INSERT OR REMOVE DEVICES ONLY WHEN THE CONTROLLER AND DEVICE SHELF ARE BOTH POWERED ON OR BOTH POWERED OFF.

For any other failures, contact your local Digital MultiVendor Customer Services representative.