

ZETACO
Acceptance Test Procedure
Zetaco Part Number: 951-461-00
Revision: B

FOR: SCZ-3.XX Disk Controller

Before Power-up:

1. Clean board edge connectors.
2. Rap board to remove any foreign materials.
3. Visually inspect the board.

Self-Tests:

1. Insert the controller into an I/O ONLY slot and install the BMC cables and terminator. *If testing an SCZ-3.2R, verify the controller has the current revision level of SCZ-3.2 Eproms and EEproms. Install jumper W4-1 and remove jumper W4-2.*
2. Install the SCSI paddleboard on the **A Backplane**.
3. Set the +5V supply to 4.7V with a scope probe on pin 4 of the ICL8211 at F28, adjust the POT to the point where the signal on pin 4 begins to go low. Seal the POT.
4. Set the supply to +5V and measure the BMC termination voltage at the emitter of Q22-1. It should be 3 volts +/- .2 volts.
5. Measure the period of the clock at D9-59. It should be 50 ns.
6. Measure the period of the clock at H15-59. It should be 50 ns.
7. Cable up the drive(s) to be used for testing. A synchronous drive such as the WREN V should be used. Both single-ended mode and differential need to be tested, so at some point in the testing, the paddleboard and drive(s) should be changed to the other mode.
8. Power-up the computer and ensure that both microprocessors run their self-tests successfully and all LEDs are OFF.
9. Set the self-test 7 bit in the E²PROM.

NOTE Each time self-test completes successfully, all of the extended self-tests are disabled (if Switch 2 is open). If any of the following four tests do not cause self-test 7 to fail, you must re-enable the self-test in order to run it again.

10. Power-down and ground D6-9. Power-up and verify that Host self-test #7 fails.

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11. Power-down and ground D6-5. Power-up and verify that Host self-test #7 fails.
12. Power-down and ground L21-20. Power-up and verify that Host self-test #7 fails.
13. Power-down and ground L6-15. Power-up and verify that Host self-test #7 fails.

Software Diagnostics:

1. Verify that the Controller is configured correctly and the drives are set up as the correct units.
2. Boot the Initializer program. If the drives need to be formatted, then run the [F] option. If the drives are already formatted, install microcode using the [M] option.
3. Run the Diagnostic program as indicated:

1 pass at 4.75 volts
1 pass at 5.25 volts
4. Boot the Reliability program. With **timeouts** and **mapping** enabled, run Random Reli on both drives, R/W with verify using all data patterns as indicated below:
 - 10 minutes at 4.75 volts
 - 10 minutes at 5.25 volts
 - 60 minutes at 5.00 volts

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Operating System Testing:

1. Run AOS/VS **contest** for 10 minutes on an MV-class computer.
2. Run MT.CLI (Mirror Test) on AOS/VS to test Mirror/Sync. Test requires 3 drives (DPJ0,DPJ1,DPJ2). PJ1 and DPJ2 must be configured as the same size.

Final Steps:

1. Set switches on controller as follows:

1 1 0 1 0 1 0 0

1 = Closed

0 = Open

E²PROM WRITE PROTECT. DEV. 24

2. The controller **must not** ship with Extended self-tests enabled. They are disabled in one of three ways:
 - a) Power-up self-test successful completion with Switch 2 open.
 - b) Updating with the Configurator with Switch 2 open.
 - c) Manually clearing the Extended flags using the Debugger.