



Tech Info Library

Workgroup Server 8150 & 9150: SCSI Information (10/94)

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Security: Everyone

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TOPIC -----

We need more detailed information on the SCSI architecture of the Workgroup Server (WS) 8150 and 9150. There is confusion regarding the internal bus vs. the external bus, and the features SCSI Manager 4.3 provides on the servers.

DISCUSSION -----

The SCSI bus implementations in the WS 8150 (the same logic board as the Power Macintosh 8100) and the WS 9150 are basically identical.

These systems have two internal SCSI bus sub-systems with an external SCSI bus that is a physical extension of one of the internal SCSI bus sub-systems.

The "internal only" SCSI bus is implemented using an 53CF96 SCSI controller.

The "internal/external" SCSI bus is based on the 53C94 controller and is built-in to an ASIC on the logic board.

Both SCSI controllers, as implemented, support at a maximum transfer rate of 5 MB/second. In practice, we typically see transfer rates in the 3.0 MB/second to 4.0 MB/second range for both SCSI sub-systems. These numbers will vary depending on drive performance, SCSI bus dynamics (for example cable length and termination), and how software reads or writes to the hard drive. A standard SCSI drive is all that is needed. A SCSI-2 or SCSI FAST drive can only be utilized as a standard SCSI drive.

Hard drives with drivers that do not support SCSI Manager 4.3 may operate at speeds similar to the same drive with a driver that does support SCSI Manager 4.3. However, it is just as likely there will be a performance degradation. The only time there should be a compatibility problem is when there are drives on both SCSI buses with the same SCSI ID. If either drive does not support SCSI Manager 4.3, one of the drives will not show up on the desktop.

Please note that we strongly recommend that any drive used on these systems have a driver that supports SCSI Manager 4.3.

Article Change History:

11 Oct 1994 - Changed visibility to Everyone.

Support Information Services

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