Macintosh: Compatibility with SCSI-2 Devices (6/96)

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TOPIC ---

Does any Macintosh computer support SCSI-2 either fully or partially? If not,
are there any methods to add that functionality?

DISCUSSION --

Power Macintosh 7500, 7600, 8500, and 9500 computers

The Power Macintosh 7500, 7600 8500, and 9500 series computers partially support
SCSI-2; they support Fast but not Wide SCSI. These computers have two SCSI
buses: an external and internal SCSI bus. The external SCSI channel is SCSI-2
compliant but does not support Fast SCSI-2. The internal SCSI channel supports
the Fast SCSI-2 standard at 10 MB per second for a hard disk array. Both
internal and external buses are 8-bit only, not wide. For more detailed
information about the SCSI-2 implementation in these computers, see Tech Info
Library article, "Power Macintosh 7500, 8500, 9500 Series: SCSI-2 Compliance."

Other Macintosh computers

SCSI-2 commands are very similar to SCSI, but SCSI-2 is not a superset of SCSI.
There is a chance a SCSI-2 drive will work on any of the Macintosh computers as
long as the drive does not implement specific SCSI-2 functions (such as Fast
SCSI or Wide SCSI). Since Apple does not make a SCSI-2 drive, any SCSI-2 drive
would also need a device driver.

But there are other caveats too, so we highly recommend that if you want to
purchase a SCSI-2 device check with the distributor for Macintosh compatibility
information. The best solution for using SCSI-2 devices is to use a third-party
SCSI-2 NuBus or PDS interface card. Compatibility and performance of any SCSI-2
device depends on the device itself, the interface card, and how these devices
implement SCSI-2 protocols. You can get Information on compatibility from the
third-party companies that supply these products.

SCSI Manager 4.3
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SCSI Manager 4.3 helps provide additional SCSI-2 support on Macintosh computers,

but it does not provide full SCSI-2 support. The Macintosh Quadra 660AV/840AV
and Power Macintosh computers contain SCSI Manager v4.3 in their ROMs. Other
Macintosh computers can take advantage of SCSI Manager 4.3 through the SCSI
Manger 4.3 extension. This software is part of System 7.5 and is also available
from online services Apple provides software updates to.

The additional SCSI-2 support provided though SCSI Manager 4.3 is still a
limited implementation of SCSI-2. SCSI Manager 4.3 among other things, provides
support for SCSI-2 messages and protocol actions.

What SCSI Manger 4.3 Provides

The SCSI Manager v4.3 is fully asynchronous, allowing each of several devices to
have multiple requests outstanding. By queuing requests in this manner, it
improves overall throughput. Other features such as DMA (Direct Memory Access)
support, further enhance overall performance. It improves functionality through
support for multiple buses and hardware configurations, and as mentioned above,
support for SCSI-2 messages and protocol actions.

Article Change History:
26 Jun 1996 - Added additional computer model.
04 Jan 1995 - Added information about new Power Macintosh computers.
26 May 1995 - Added additional information on SCSI Manager 4.3.

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