

## 8.7 & 17.4 GB Wide SCSI Disk Drives

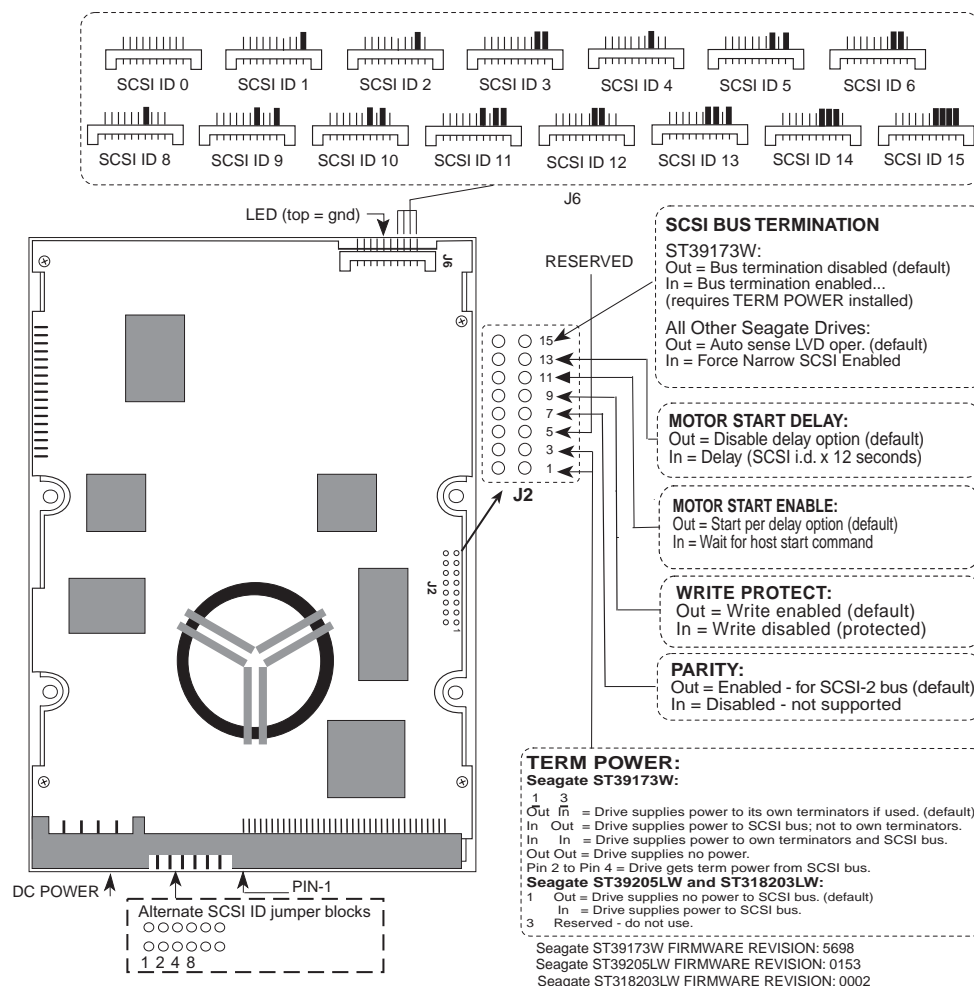
This document includes information on PDB-00440-04 (8.7GB 7200 rpm), PDB-00440-07 (8.7GB 10000 rpm), and PDB-00440-08 (17.4 GB 10000 rpm). Note that multiple sources for some of these drives have been qualified and are included.

### Seagate Barracuda ST39173W 3.5" Wide SCSI Disk Drive

### Seagate Cheetah ST39205LW 3.5" Wide SCSI Disk Drive

### Seagate Cheetah ST318203LW 3.5" Wide SCSI Disk Drive

MODEL #	FORMATTED CAPACITY	NUMBER OF LOGICALS	BITMAP SIZE	FORMAT INTERLEAVE	ALPHA MICRO PART NUMBER
ST39173W	8.68GB	272	4087	1	PDB-00440-04
ST39205LW	8.75GB	274	4088	1	PDB-00440-07
ST318203LW	17.37GB	543	4094	1	PDB-00440-08



**Fujitsu MAE3091LP 3.5" Wide SCSI Disk Drive (7200 RPM)**

**Fujitsu MAH3091MP 3.5" Wide SCSI Disk Drive (7200 RPM)**

**Fujitsu MAG3091LP or MP 3.5" Wide SCSI Disk Drive (10000 RPM)**

**Compaq MAG3091LP 3.5" Wide SCSI Disk Drive (10000 RPM)**

**Compaq MAG3091MP 3.5" Wide SCSI Disk Drive (10000 RPM)**

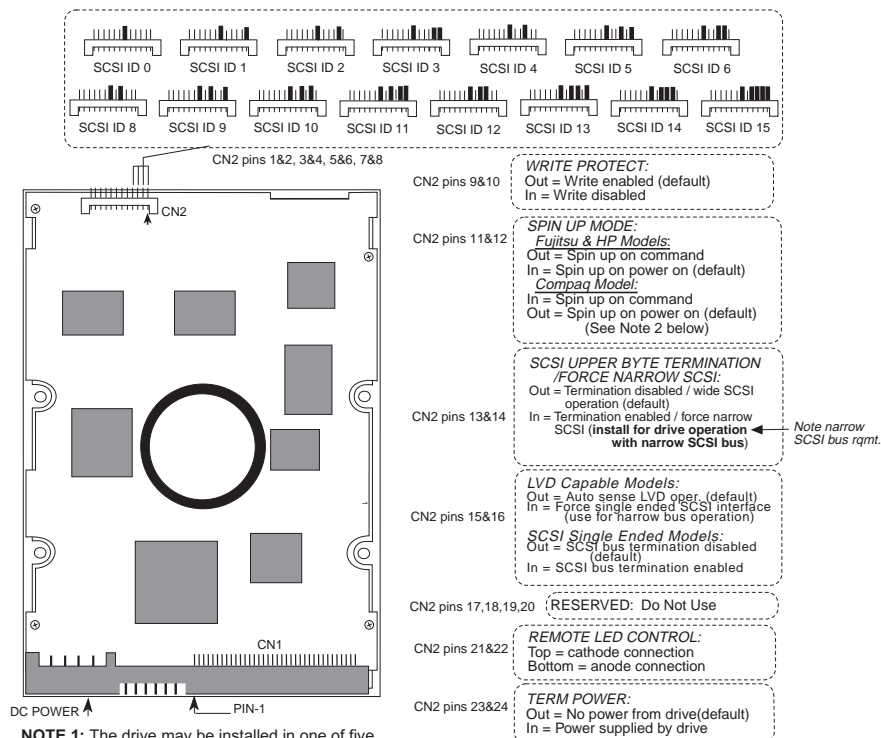
**Fujitsu MAJ3091MP 3.5" Wide SCSI Disk Drive (10000 RPM)**

**HP MAJ3091MP 3.5" Wide SCSI Disk Drive (10000 RPM)**

**Fujitsu MAJ3182LP 3.5" Wide SCSI Disk Drive (10000 RPM)**

**Fujitsu MAN3184MP 3.5" Wide SCSI Disk Drive (10000 RPM)**

MODEL #	FORMATTED CAPACITY	NUMBER OF LOGICALS	BITMAP SIZE	ALPHA MICRO PART NUMBER
MAE3091LP	8.7GB	272	4096	PDB-00440-04
MAG3091LP	8.7GB	273	4082	PDB-00440-07
MAJ3091LP	8.7 GB	273	4086	PDB-00440-07
MAH3091MP	8.7 GB	273	4087	PDB-00440-04
MAJ3182LP	17.43 GB	545	4094	PDB-00440-08
MAJ3091MP	8.7 GB	273 / 272	4086 / 4096	PDB-00440-07
HP MAJ3091MP	8.68 GB	272	4084	PDB-00440-07
MAN3184MP	17.52 GB	548	4093	PDB-00440-08



**NOTE 1:** The drive may be installed in one of five orientations, either PCB down or on any edge

**NOTE 2:** For a Compaq drive, the spin up delay for each drive is 10 sec x SCSI ID setting. Therefore, if any of these drives are configured for SCSI ID 2 or higher, you will need to insert a SLEEP command just prior to the SCZDSP command to delay execution of the SCZDSP command long enough for these drives to spin up.

## IMPORTANT TERMINATION INFORMATION

Most disk drives do not contain SCSI bus terminators, and the SCSI bus must be terminated at its physical end by an external terminator. Only the Seagate ST39173W drive contains an on-board SCSI bus terminator. For this drive, the **SCSI Bus Termination** jumper enables/disables this on-board active *termination*. If the SCSI bus is terminated by an external SCSI terminator, or by another SCSI device with termination enabled, you must remove this jumper to avoid a termination conflict which could make your computer perform erratically. Conversely, if the SCSI bus is not otherwise terminated, this jumper *must* be installed. For **AMOS computers**, this drive performs best when used with an external active terminator (PRA-00222-xx). We *do not recommend* using this drive in an AMOS computer with the SCSI Bus Termination jumper enabled. See the jumper setting details on pages 1 and 2 for additional details.

The **Term Power** jumper(s) lets the drive supply power to the SCSI bus and its own on-board terminators if it contains any.

For the Seagate ST39173W drive only, we recommend installing the jumper between J2 pin 2 and pin 4. This causes the drive to accept termination power from the bus if its own terminators are enabled; otherwise, it keeps the drive from interfering with the bus termination power.

For other drives, we recommend configuring the drives so that SCSI termination power is supplied externally and is not affected by the disk drive.

Refer to your hardware documentation for more detailed information, or call the Alpha Micro Technical Assistance Center for help.

## SOFTWARE REQUIREMENTS



In order to create a single logical device for the 8.6 and 17.4 GB disk drives (AMOS 2.3A), the following patch is required:

SP2040: AMOS.MON 2.3A(485) or later    hash = 070-324-447-627 (use MONHSH)

In order to create a single logical device greater than 16 GB, the following software is required:

BITMAP.LIT 2.1(118)-2 or later    hash = 052-154-570-143

New versions of the SCSI dispatcher are required when using these drives. These new versions are as follows:

SCZRR.SYS	1.0(117)-2 or later	hash = 606-251-312-174
SCZ190.SYS	1.0(117)-2 or later	hash = 642-025-245-424

In addition, when using the Fujitsu or Compaq drives with AMOS 1.4E, the following patches are required:

SP2030: DSKANA.LIT	1.0(117) or later	hash = 701-635-215-412
SP2031: RNDRED.LIT	1.0(102) or later	hash = 310-220-732-147



When using large capacity disk drives with AMOS 1.4E, you are limited in disk drive capacity to 85 logical disks (only 2.8 GB). This is due to input line limitations in the text editor used to create the BITMAP and DEVTBL statements in the SYSTEM.INI file, which require all information on one text line.

We tested these drives using the following versions of related software. While the drives may work with earlier software versions, Alpha Micro supports them with these versions and later.

The Fujitsu MAJ3091LP and MP, MAH3091MP, MAJ3182LP, MAN3184MP, Compaq MAG3091MP and the Seagate ST39205LW and ST318203LW are not supported on AMOS 1.4.

**For AMOS 1.4E and AMOS 2.3A**

FMTS2.LIT	1.0(104)-3 or later; hash = 551-747-537-531
FIXLOG.LIT	1.1 (112) or later; hash = 035-534-463-407
SCZRR.DVR	hash = 054-312-577-741 or later
SCZ190.DVR	hash = 421-765-414-317 or later
SCZR60.DVR	hash = 706-323-120-376 or later
SCZ7K.DVR	hash = 514-067-655-625 or later
SCZ138.DVR	hash = 075-476-163-546 or later

**BOOT PROM COMPATIBILITY INFORMATION**

The following tables show the boot PROM revisions we used when testing these drives for compatibility with the various Alpha Micro CPU boards. While the drives may function well with earlier revision boot PROMs, they are supported by Alpha Micro only with these revisions and later.

**Fujitsu MAE3091LP, MAG3091LP, MAJ3091LP, MAJ3182LP, MAH3091MP, MAH3091LP, MAN3184MP, Compaq MAG3091LP, Seagate ST39205LW & ST318203LW:\***

CPU Board	Description	PROM Revision
AM-137	Eagle 100	P00 (PDB-00172-90)
AM-138-10	Eagle 250	D00 (DWP-00138-30)
AM-138	Eagle 450	D00 (DWP-00138-30)
AM-172	Roadrunner 030, used in Eagle 200/300 computers	P00 (PDB-00172-90)
AM-174	Roadrunner 040, used in Eagle 500 and Eagle 550	P00 (PDB-00174-90)
AM-176	Roadrunner 060, AM-6000, AM-6060	C00 (PDB-00176-10)
AM-176-10	Roadrunner 75, AM-7000, AM-7060	C00 (DWP-00176-21)
AM-190	AM-4000	E00 (DWB-00191-10, Rev. A05) <sup>1</sup>

\*Note that the Fujitsu MAH3091MP, MAN3184MP, Compaq MAG3091MP, Seagate ST39205LW and ST318203LW are only supported on Eagle 250, Eagle 450, AM-6000, and AM-7000 systems.

**Seagate Barracuda ST39173W disk drive:**

CPU Board	Description	PROM Revision
AM-137	Eagle 100	M00 (PDB-00172-90)
AM-138-10	Eagle 250	A00 (DWP-00138-30)
AM-138	Eagle 450	B00 (DWP-00138-00)
AM-140	AM-3000M (with AM-540)	E00 (PDB-00140-50)
AM-172	Roadrunner 030, used in Eagle 200/300 computers	M00 (PDB-00172-90)
AM-174	Roadrunner 040, used in Eagle 500 and Eagle 550	N00 (PDB-00174-90)
AM-176	Roadrunner 060, AM-6000, AM-6060	A01 (PDB-00176-10)
AM-176-10	Roadrunner 75, AM-7000, AM-7060	B00 (DWP-00176-21)
AM-190	AM-4000	E00 (DWB-00191-10, Rev. A05) <sup>1</sup>

1. AM-4000 boot PROMs are located on a small PCB (printed circuit board) (DWB-00191-10) that plugs into the AM-190 board. In the table above, the revision of the boot PROMs is E00 and the revision of the printed circuit board assembly that contains the boot PROMs is A05.

These drives are not supported on the SASI bus on older AMOS CPU boards. They are supported only on the SCSI-2 and Wide SCSI-2 bus (also called "dispatched SCSI"). To use these drives on the narrow SCSI-2 bus, you must use an adapter between the drive and the SCSI cable.

Note that the latest PROM revisions, shown in the table above, may have been made for reasons other than disk drive support.