

CONFIGURATION INFORMATION

This copy of 86-DOS includes disk drivers for the Tarbell double density disk controller run in single density DMA mode. Console I/O uses the serial port of the SCP CPU Support Card, and printer output goes to the Support Card parallel port.

To set up the Tarbell disk controller, the bootstrap ROM must be disabled and the I/O port address must be set to 60 - 7D hex. To disable the bootstrap, the jumper from E9 to E10 must be disconnected and a jumper between E9 and E8 inserted. To set the port address, disconnect the jumper from E19 to E20, and install a jumper from E19 to E18. All other jumper options should be set as recommended by Tarbell (or the same as how you set them for 8080/Z80 operation).

The disk drivers assume you are using two double-sided, single-density drives. In order to be completely compatible with single-sided use, each side is treated as a separate drive. Single-sided users will have two drives, A and C. The back sides (side 1) of the drives are B and D.

The current version of the Tarbell disk drivers cannot transfer a record that straddles a 64K boundary. Any attempt at a disk transfer near or above 10000 hex may crash the system. Systems with 64K or less are always safe.

The CPU Support Card should simply be set for normal Monitor operation, with all switches of S1 on. Monitor version 1.5T is needed to boot the disk. Switch 0 of S2 may be turned on to automatically boot without entering the Monitor.

The first two tracks of the disk are reserved for the 86-DOS system. Track 0, sector 1 is loaded and executed at absolute address 200 hex by the Boot command of the Monitor. This small program at 200 hex then loads the rest of track 0 and all of track 1, starting at absolute address 400 hex. Control transfers with an inter-segment jump to location 400 hex such that the instruction pointer is 0 and the code segment register is 40 hex (JMP 0,40H with our assembler).

The I/O system occupies the next 8 sectors (1K bytes) on the disk after the boot sector, i.e., track 0 sectors 2 through 9. The present I/O drivers occupy only about half this space.

86-DOS starts on track 0, sector 10. It occupies less than 4K (32 sectors), which means it overlaps partly onto track 1.

There is nothing sacred about assignments within the first two tracks of the disk. In particular, the I/O system may be any size, with 86-DOS starting right after it. 86-DOS is relocatable to any 16-byte (segment) boundary. See the section called "Customizing the I/O System" for information on changing the I/O system and linking it to 86-DOS.