

The files 4KBAS-xx.TAP are paper tape (or cassette) images of Altair 4K BASIC version 4.0 with patches applied to provide additional I/O port support for loading and saving programs.

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-xx      Supported Alternate Port
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-06      88-SIO port 6/7 (cassette port)
-12      88-2SIO (2nd port on the board)
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If A14 is raised, console input comes from the alternate port as well as the BASIC console. If A15 is raised, then console output is directed to the alternate port in addition to the BASIC console. This allows load and saving programs through what BASIC thinks is the console port.

Important

When loading the .tap files, use the 8K BASIC version 4.0 bootstrap loader, NOT the 4K BASIC version. If using the MBL PROM, then this doesn't matter.

Boot Support for the 2nd Port on the 88-2SIO

The checksum loader on the tape supports loading through the 2nd port on the 88-2SIO (I/O address 12h/13h) by using a sense switch setting of 6 (0110) on switches A11-A8. A bootstrap loader customized for the 2nd serial port must be used.

If you want to use the MBL PROM to load BASIC, then you must use Martin Eberhard's customized MBL PROM (MBLe) that supports the 2nd 2SIO port, also with a sense switch setting of 6. The standard MBL PROM from MITS does *not* support the 2nd 2SIO port for loading.

Source Code

Source code for the patches is in the file PATCHES.ASM. Different serial ports can be selected with equates near the start of the file.

The file 4KBAS40.BIN is a binary dump of 4K BASIC v4.0 with the two manual patches mentioned in PATCHES.ASM already applied. You can replace the code starting at 0F40h with the changed binary data from any changes you make to PATCHES.ASM.