This ReadMe is in regard to using Altair 680 Cassette BASIC with a high speed reader- punch attached to the serial port on the 68-UIO board. Unlike the console serial port, the UIO serial port supports the CTS line to the 6850. The CTS line on the UIO should be connected to the handshake output from your punch (probably RTS). This will throttle the output rate from the 680 to the punch. The UIO manual shows how to configure DIP switches to enable use of the CTS signal.

The ROM monitor in the 680 uses the console serial port to load S-Record files using the "L" command. To instead load S-Record files through the UIO serial port (the high speed reader), a PROM is required just as MITS did with the 680 cassette interface board. Burn a 1702a with UIOROM.S19 and install the EPROM in socket "V" ($FD00). As with the cassette interface, the entry point to load an S-Record file is $FD00. Alternatively, you can load the file "UIOROM at $7D00.s19" into 680 RAM using the "L" command and replace "$FDxx" with "$7Dxx" in these instructions. Of course, you'll 32K of RAM in your computer.

The code to load S-Record files does not fill the entire EPROM, so a binary loader is also included in UIOROM. The binary format is the same as used by MITS with 8800 paper tape and cassette, as well as with the BINLOAD and BINSAVE programs in this directory. To load a binary format tape, jump to $FD80 in the EPROM.

After creating and installing the EPROM, punch the paper tape CASBAS.TAP from your PC if you can properly punch tapes from the PC. Otherwise, punch the tape from your 680 using the instructions in the file "Punching Boot Tapes from the 680.pdf". The punched tape is a binary format paper tape compatible with the binary load option in UIOROM.

To load the BASIC tape, jump to $FD80 and then start the reader. When the tape finishes loading, BASIC will automatically start.

The CSAVE command works the same as with cassette. Type CSAVE "X" where "X" is a letter to help you identify the program.

The CLOAD command works basically the same as with the cassette. Type CLOAD "X" where "X" can be any character you want. BASIC is patched to ignore the identifier so you don't have to remember how it was punched.

Note: The file "BPATCH (BASIC).ASM" contains the patches made to BASIC to make cassette BASIC operate as outlined above.