8K BASIC in PROM

The 8K BASIC in this folder is not the "real" ROM BASIC from MITS. Instead, it is the normal RAM based 8K BASIC stored in PROM with a small loader. Upon execution, the loader copies 8K BASIC down into RAM starting at address zero and runs it – just as if BASIC had been loaded from paper tape or cassette.

Burning PROMs with 8K BASIC

The code has been broken up into four 2K binary files. The memory address of each binary file is at the end of the file name. For example, 8kBas_e0 loads at E000h. 8kBas_e8 loads at E800h, and so on. Binary files can be split for 1K 2708's, or combined for 2732's or a 2764.

Running 8K BASIC from ROM

To run 8K BASIC from ROM, examine address 160000 octal (E000 hex). Then set the sense switches to identify the type of I/O port used for your terminal device. These settings are the same as used for all MITS software products from version 4 up. Finally, depress the RUN switch to start ROM BASIC.

Sense Switch Settings (A15-A8)

0000 0000	2SIO with 2 stop bits
0001 0000	2SIO with 1 stop bit
0010 0000	SIO port (not rev 0)
	etc.

Disk Bootloader, Altair DOS, CP/M

The Disk Bootloader is present in the last 8K BASIC ROM and can still be executed when needed by examining octal address 177400 (FF00 hex) to load Altair DOS, CP/M, etc.

Since 8K BASIC in ROM leaves only 56K of RAM, you'll need a 56K or smaller CP/M to run when 8K BASIC is in ROM. Use MOVCPM and SYSGEN to create a smaller CP/M if required.