CP/M for Poly-88 running a Polymorphic Single Density Controller

Polex PROM

CP/M for the Poly-88 requires the Polex PROM (Poly-88 Extension) to be installed in the 2nd PROM socket on the Poly-88 CPU board. Polex handles run-time swapping of PROM and RAM in the first 4K of memory and provides console and serial I/O for CP/M. **_Polex version 3.11 or newer is required_**. See the Polex folder for more information.

BootMod PROM

BootMod is an extension module PROM for Polex. The PROM installs in the 3rd PROM socket on the Poly-88 CPU board. It provides a single boot command (BO) for a variety of floppy controllers including Altair, Micropolis, Tarbell, Polymorphic single density, and both the single density and double density North Star controllers. BootMod is located in the Polex folder and is required to boot from the Polymorphic single density controller (BootMod ver 1.2 or newer is required).

Disk Image Files

CPM22v11-56K-SDC.DSK is track-buffered CP/M 2.2 for a Poly-88 running the Polymorphic single density controller. CP/M on the disk is sized for 56K of RAM. Performance of the track buffered CP/M is 20%-70% faster than non-buffered versions across a variety of activities. This performance increase is obtained even with write verify enabled (enabled by default, see the MODE byte in the file BIOS.ASM).

A customized MOVCPM is included to size CP/M for different amounts of RAM (run MOVCPM followed by SYSGEN). Included are typical CP/M programs as well as file and disk image transfer utilities to exchange data with a PC.

IOBYTE

Poly-88 CP/M provides full IOBYTE support. The IOBYTE allows redirection of logical CP/M devices to different physical devices. IOBYTE implementation is required by some programs (e.g., Kermit) for proper operation. The possible logical-to-physical device assignments are shown below:

CON device (bits 1,0):
    00 - TTY uses serial port
    01 - CRT uses keyboard/video*
    10 - BAT indirect through RDR and LST
        logical device
    11 - UC1 uses serial port
	PUN device (bits 5,4):
	    00 - TTY uses serial port
	    01 - PTR uses serial port*
	    10 - UR1 uses serial port
	    11 - UR2 uses keyboard/video

RDR device (bits 3,2):
    00 - TTY uses serial port
    01 - PTP uses serial port*
    10 - UP1 uses serial port
    11 - UP2 uses keyboard/video
	LST device (bits 7,6):
	    00 - TTY uses serial port
	    01 - CRT uses keyboard/video
	    10 - LPT uses serial port*
	    11 - UL1 uses serial port

    * = Default IOBYTE

The STAT utility in CP/M is typically used to change device assignments. These assignments are temporary and the defaults shown above are restored whenever CP/M is cold started. To permanently modify the IOBYTE, use DDT to patch location 2034h of a CP/M SYSGEN image while the image is in memory. After exiting DDT, immediately run SYSGEN to write the patched CP/M image to the boot tracks, or save the patched memory image to a CPMxx.COM file.