PC2Flop and Flop2PC (for North Star SD controller on IMSAI)

PC2Flop writes a North Star single-density floppy disk with a disk image transmitted from a PC. Flop2PC saves an image of a North Star single-density disk to a PC. The disk image is transferred through either serial port on an IMSAI SIO-2 board. The XMODEM checksum or CRC protocol is used for the transfer. The image is read or written directly from/to the floppy in raw format (256 bytes per sector, 10 sectors per track, 35 tracks). The disk image is the linear sequence of 256 byte sectors from track 0, sector 0 through track 34, sector 9.

These programs run standalone at 0x100 or under CP/M. Any type of disk (e.g., CP/M, North Star DOS) can be read or written even if running under CP/M.

Standalone operation may be required to create a bootable disk when no other bootable disk is available. There are a couple of ways to load PC2FLOP into a cold machine:

1) Use the front panel to enter the hex bytes of the program listed in LOADER.PRN. Execute the loader by running from zero (no feedback is given), then send the file PC2FLOP.COM through the first SIO-2 port. After transmission is complete, reset the computer and run PC2Flop at address 100h.

2) If you have an Intel hex file loader in PROM, load the file PC2FLOP.HEX and then run from 100h.

When copying a disk image to the PC (Flop2PC), the program attempts several retries, including restoring the track both from zero and from past the current track. If the read still fails, the error is noted and the copy process continues so that the remainder of the disk can still be recovered.