## **PCGET and PCPUT** (for IMSAI SIO-2 serial board)

These programs make it easy to load a file from the PC into a CP/M system (PCGET) or write a file from a CP/M system to a PC (PCPUT). The XMODEM protocol is used for file transfer. The program defaults to using the console serial port. If the command line is followed by a B, then file transfer takes place over the second serial port.

When used with an Altair FDC, the SIO-2 base address needs to be changed from 00h to 10h. This is an assembly option in the PCGET and PCPUT source files. Ready to run versions of PCGET and PCPUT configured for the SIO-2 at 10h are of the form PCGET10H.

Once PCGET is on the computer, subsequent file transfer – including retrieval of the PCPUT program – is simple. However, getting PCGET onto the computer to begin with is the classic chicken and egg quandary. Following is a way to get PCGET onto the computer for the first time using PIP and LOAD over the serial port. This technique requires a terminal emulator or file transfer program that can insert a delay between each character sent.

A>PIP PCGET.HEX=CON: (press RETURN and wait for CP/M to load PIP at which time you'll see a line-feed.)

Assuming Tera-Term, use the "Setup->Serial Port..." menu option to set the transmit delay for "msec/char" to 10. Then send the file "PCGET.HEX" using simple ASCII transfer. You will see the hex file displayed as it is transfers. It is OK if some lines don't display at the left edge of the screen. File transfer will continue for a while after the file transfer dialog box closes. This is normal.

When file transfer is complete, type Ctrl-Z to signal end-of-file. PIP will exit to the A> prompt after a short delay for CP/M to warm start.

After file transfer is complete, turn off the character delay in the terminal emulator.

A>LOAD PCGET (create PCGET.COM)

FIRST ADDRESS 0100

LAST ADDRESS 04B4 (you may see different values than shown here)

BYTES READ 03B5

RECORDS WRITTEN 08

A>PCGET PCPUT.COM (now try it - use PCGET to retrieve PCPUT)

Send the file now using XMODEM...