

Vector Graphic MZ Operation using the ZCB Serial Port

This folder contains files for getting a Vector Graphic MZ machine running using the serial port on the ZCB instead of using the Bitstreamer II serial port or a Flashwriter and keyboard. This configuration affects common VG software like the ROM monitor, CP/M and MDOS.

The serial port version of the VG monitor uses Bitstreamer II serial port A at I/O address 2/3. However, the default address of the ZCB serial port (same 8251 UART as the Bitstreamer II) is at address 4/5 (and also appears again at 6/7). The ZCB serial port can be jumpered to 0/1 (which also appears again at 2/3), and the board then works with standard VG software. However, this modification requires cutting a board trace and also creates a conflict with the Flashwriter keyboard port at address 0/1.

To work around this, a modified version of the "Extended Systems Monitor ver 4.0c" has been created in this folder. This version of the monitor performs console I/O through address 4/5. Standard software packages like VG branded CP/M and MDOS call the monitor entry points for console I/O, so with this modified monitor in place, these packages work through the ZCB serial port without additional modification. Some versions of Lifeboat CP/M directly access port 2/3 and may not work unless CONFIG.COM is patched at 0120h with the Vector Graphic code 084h. See the file "Fixing VG17 Lifeboat 22.txt" in the "Micropolis Disk Images" directory. This patch may not work for Lifeboat CP/M 1.4.

The modified monitor also includes an "H" command to load Intel hex format files through the console serial port directly into memory. This replaces the standard "H" (jump to high memory) command.