

In its default configuration, the SVGA circuitry supports most application software that is designed for the VGA or EGA video standard. Just turn on the computer and install the application package as described in the application documentation. At system startup, the SVGA circuitry configures itself to 80-column text mode.

SVGA Windows accelerator circuitry is integrated into the main logic board. This Super VGA circuitry is designed for users of Windows and CAD applications. Bit block transfer (BITBLT) and a hardware cursor combine to increase the performance speed of Windows and windowing programs by as much as 15 times over standard VGA. Tasks of opening, closing, scrolling, and resizing windows are performed instantaneously.

MS-DOS, AutoCAD, and other non-Windows applications that use a hardware cursor will also realize increased performance.

The SVGA Accelerator diskettes provided with your computer include the video utilities and drivers that optimize the computer's video capabilities for your software applications.

#### Features:

The video features include:

- Hardware cursor and a bit block transfer (BITBLT) to accelerate performance of Windows and windowing programs.
- 512KB of video memory, expandable to 1MB
- Support for 256-color, 1024 x 768 graphics; 16-color, 1280 x 960 graphics (These modes require 1MB of video memory.)
- Compatibility with software written for the Hercules Graphics Card and the IBM video Standards preceding VGA: Monochrome Display Adapter (MDA), Color/Graphics Adapter (CGA), Multi-Color Graphics Adapter (MCGA), and Enhanced Graphics Adapter (EGA).
- Support for both monochrome and color, fixed- or multiple-frequency, interlaced and non-interlaced VGA analog monitors
- Support for 8514A-compatible, non-interlaced monitors (You can switch between the VGA and 8514/A standards without changing monitors, providing that your monitor supports both standards.)
- Support for extended text modes: 80 columns by 50, 43, 34, or 25 lines; 132 columns by 50, 44, 28, or 25 lines.
- Enhanced display drivers for many popular applications

Faxback Document # 2342 will provide specific information on upgrading the video memory.

#### Connections:

Connect a VGA analog monitor to the video connector on the back of the computer.

Using an 8514/A-Compatible Video Adapter:

You can connect an 8514/a compatible adapter to the video feature connector

on your main logic board. An 8514/a adapter will co-reside with the on board VGA circuitry, provisions for cooperative operation are built into the 8514/a board. The 26 pin pass through cable will allow the two boards to interact with each other and display the appropriate output to a multifrequency VGA monitor. Use the 8514/a video board only if the software requires that specific video board type. Most video modes can be handled by the on board VGA circuitry without the addition of another board.

The 8514/a compatible video boards usually come with the appropriate pass through cable to connect to the VGA board. The CPU has a 26 pin header connector (male) on the main logic board at location J12, this is the video feature connector. In addition, change the setting of Jumper Block J28 to disable the on-board video circuitry.

Faxback Document # 2360 will provide main logic board jumper information.

#### Setup Information:

After you connect the monitor, run the setup\* utility, and enter the appropriate information for the SVGA Refresh Rate and Video fields.

\* The setup utility is started by pressing F2 during the cpu startup

Faxback Document # 2362 will provide setup utility information.

#### Memory Considerations:

The SVGA circuitry uses memory locations A0000-C7FFF for video memory and the extended video BIOS. These are the same locations used by standard VGA circuitry. If you install an EMS (Expanded Memory Specification) adapter or other device that uses these memory locations, reconfigure the device to use other memory locations.

For an EMS adapter, you can usually designate the exclusions when starting the EMS driver. Consult your device documentation to determine the memory locations used.

The SVGA circuitry uses memory locations B0000-B7FFF for monochrome mapping. If you are running EMS software that uses this memory range, either reconfigure the EMS driver or do not set the video for monochrome mapping.

#### Software Configuration:

Windows, OS/2 Versions 1.2 and 1.3, and many MS-DOS-based applications require that you install software drivers in order to use Super VGA modes. Several such drivers are supplied on the diskettes packaged with the computer.

Faxback Document # 2366 will provide driver installation information.

(rjs-05/21/93)