The video circuitry for your computer is included on the main logic
board. This circuitry features:

° IBM VGA compatibility plus support for 16-color, 1024 x
   768 graphics; 256-color, 800 x 600 graphics; and 256-
   color, 640 x 480 graphics

° support for upgrading to 1MB of video memory

° with 1MB memory option: support for 16-color, 1280 x 1024
   interlaced graphics; 256-color, 1024 x 768 non-interlaced
   graphics; and bit block transfer (BITBLT) for enhanced
   video performance with Windows and hardware cursor
   applications

° support for 132-column text by 25 rows and by 43 rows

° a minimum of 512KB of video memory (RAM), expandable to
   1MB for some computer models

° a color palette of up to 16.8 million simultaneous
   colors

° compatibility with VGA analog monochrome and color,
   fixed- and multiple-frequency monitors (including 8514/A-
   compatible monitors)

In its default mode, the video supports most software designed for the
EGA and /or VGA standard. You must use a VGA analog color or monochrome
monitor. The video circuitry is also compatible with software written
for these video standards:

° VGA (Video Graphics Array)

° VESA (Video Electronics Standards Association)

° MCGA (Multi-Color Graphics Array)

° EGA (Enhanced Graphics Adapter)

° CGA (Color/Graphics Adapter)

° MDA (Monochrome Display Adapter)

The modes available are listed in "Super Video Modes" and "Standard Video
Modes."

Monitor Connection

Connect a VGA analog monitor to the video connector on the back of the
computer. If you install an 8514/A-compatible expansion adapter, use a
26-pin pass-through cable to connect the adapter to the VGA Feature
connector on the main logic board. Refer to "Main Logic Board Layout"
in the "Installing Optional Hardware" section to locate the VGA Feature
connector. Contact your computer dealer for the required cable.

Memory Considerations

The SVGA circuitry uses memory locations A0000-BFFFF for video memory
and locations C0000 - C7FFFF for the extended video BIOS. These are
the same locations used by standard VGA circuitry. If you install an
EMS (Extended 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.

Operation

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 applications package as
described in the application documentation. At system startup, the SVGA
circuitry is configured for 80-column text mode.

(smc-02/02/94)