

EUT:VGA CARD

FCC ID:127MM-V102A

BIOSTAR GROUP

USER'S MANUAL

FCC/ASEL 1271

AUG 03 1998

CONTENTS

Intel 740 AGP Card User's Manual

Chapter 1 : Introduction	1-1
Chapter 2 : Features	1-4
Chapter 3 : Specifications	1-7
Chapter 4 : Connectors and Jumper Setting	1-8
4-1 CONNECTORS	1-8
4-2 JUMPER SETTING	1-9
Chapter 5 : Intel 740 Hardware Installation	1-10
Chapter 6 : Intel 740 Software	1-12
6-1 Software List	1-12
6-2 Software Installation	1-13
6-3 Using Software	1-15
APPENDIX A : FCC Information	1-20
APPENDIX B : 3D Dictionary	1-22

The Intel740 2D capabilities includes BLT and STRBLT engines, a hardware cursor, and an extensive set of 2D registers and instructions. The high performance 64-bit BitBLT engine provides hardware acceleration for many common Windows* operations.

The Intel740 also includes dedicated video engines for support of video conferencing and other video applications.

The Video Port interface also provides video capture for video input devices. The Video interface includes support for full motion video, MPEG/DVD, Intersect and VBI and NTSC and PAL TV out (optional).

The Intel740 is a graphics hardware accelerator providing a variety of features which can enhance the speed and visual quality of 2D and 3D applications. The Intel740 feature set also includes DVD, video capture, VBI and intercast programming capabilities. The Intel740 works with the OpenGL*, Microsoft DirectX*, and Win32* programming interfaces. Both the OpenGL and the DirectX APIs give graphics applications a standard way to invoke 2D, 3D and video graphics rendering functions and allow a software application to be hardware independent.

The Intel740 OpenGL driver set runs on personal computers that are based on the Intel Architecture with Accelerated Graphics Port (AGP) support and have Microsoft WindowsNT* 4.0 or newer operating system with the OpenGL 1.1 application programming interface (API). The Intel740 DirectX driver set runs on personal computers that are based on the Intel Architecture with AGP support and have the Microsoft Windows98*, Windows95* with USB support, or WindowsNT 5.0 operating system with DirectX 5.0 (or newer) and Win32 programming interfaces. This manual presents the Intel740 accelerated functions that are callable from OpenGL, DirectX and Win32 application programs.

or Pixel Perspective Correct Texture Mapping upmapping with Trilinear Filtering 1024x1024 1x1	
Texture Formats: 1, 2, 4 or 8-bit paletized ARGB 555 0565 4444; Compressed AYUV 0422 0555 44.	
Texture Memory Limited Only by System RAM	
Optimized for 800x600x16 and 640x480x16 Dis- play Resolution	

Chapter 3: Specifications

- ❖ **Graphics Engine:**
 - Intel740 Graphics and Video Accelerator
- ❖ **Bus Type:**
 - 64-bit AGP 1.0 Interface
 - Support for AGP 2X Mode and Execute-Mode plus Sideband Addressing
- ❖ **Memory Configuration:**
 - 2MB, 4MB or 8MB
- ❖ **Connectors:**
 - Feature Connector
 -
 -
 - Standard 15 pin VGA to monitor connector
 - TV output Connector (Optional)
- ❖ **Software and Driver**
 - Windows 95, Windows 98, Windows NT 4.0, DirectX, and OpenGL
 - Xing Software MPEG Player

Chapter 5: Intel740 AGP Card Hardware Installation

- With the power off, remove your computer cover. Find the AGP slot and remove the bracket and screw. (Remember which cables go to which connectors. You may want to label your computer's cables before disconnecting them!)
- Insert Intel740 AGP Card firmly into the AGP slot. Care should be taken to press the card evenly and snugly into its slot. Once Intel740 AGP Card has been installed properly in its slot, secure its screw (See FIGURE 5-1).

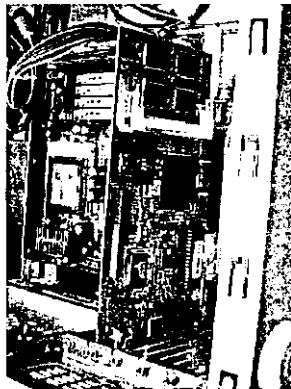


FIGURE 5-1

- Connect the standard VGA connector to Monitor connector on Intel740 AGP Card to your monitor with a standard monitor cable (See Figure 5-2).
- If your Intel740 AGP Card has the Video-In Connector, TV-Tuner Connector and TV output Connector, you can use cables attach with the package to connect with the connectors on Intel740 AGP Card. It depends on what you need (See Figure 5-2).
- Secure your computer cover and attach any previously removed cable(s). Hardware installation is completed.

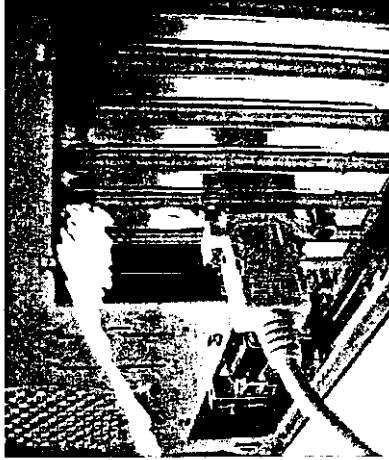


FIGURE 5-2

- ❖ The drivers **CAN NOT** be installed directly from Multimedia CD by using CD Installation Utility:
Please read the README.TXT located in the root directory on Multimedia CD to get drivers' location and then refer to the INSTALL.TXT files located in each driver directory on the Multimedia CD to install drivers.

NOTE : Recommended installation orders for Windows 95/98:

1. Intel740 Windows 95/98 Drivers
2. Microsoft DirectX
3. Others (Games, Testing Applications...)

❖ **6-3 Using Software**

- ❖ 6-3-1 Using Intel740 Windows 95 / 98 Additional Control Panels

NOTE 1: You can move the mouse cursor to the background of screen and right click the mouse. Then please select properties in the pop-up menu to invoke the Display Properties Control Panel as follows.

NOTE 2: If you don't know how to change Resolution, Color Depth and Font Size, please refer to the Windows 95/98 user's manual.

6-3-1-3 Information Panel

Select 740 Version property sheet in the Display Properties dialog, you can get the display driver information, BIOS information, Memory Size and DirectX version (See Figure 6-3).

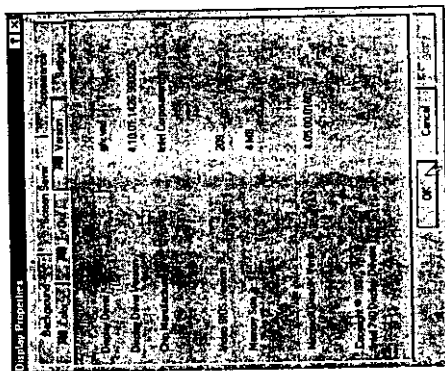


FIGURE 6-3

❖ 6-3-2 Using Xing MPEG Player

After the Xing MPEG Player Software Installation completed, If you don't know how to use Xing MPEG Player, please refer to Xing MPEG Player Help in the Xing MPEG Player Group.

APPENDIX B: 3D Dictionary

- ❖ **Alpha blending**
Combining two images with different transparency levels so that one image appears visible through the other. An object's transparency is defined as its Alpha value or Alpha level.
- ❖ **Anti-aliasing**
The removal of artifacts from an image.
- ❖ **Bi-linear sampling/filtering**
A combination of four colors in a single 3D image used to improve that image's resolution.
- ❖ **Clipping**
Removal of any image displayed outside of a predefined shape.
- ❖ **Compressed Textures Depth cueing**
Changing the color and brightness of a 3D image as it moves, relevant to the viewer. Color becomes less bright as the image moves away, brighter as it moves closer.

❖ **Dithering**

Substituting combinations of colors you do have for colors that you don't. For example, if your computer is only capable of displaying 256 colors and you load an image that use 65,000 colors, your computer will create substitutes for the colors you don't have by combining the colors that you do. The color quality of a dithered image is inferior to a non-dithered image

❖ **Double buffering**

A way for your computer to work on an image two different ways at once. Before displaying an image, your video card calculates what a finished image will look like and displays that image while it is calculating the next image in a video stream. Double-buffering affords smoother playback for video or any other multiple-frame file format.

❖ **Frames Per Second (FPS)**

A measurement of how often information in a video or animation file is updated on your screen or how many frames of motion you see in a given second. Movies and television shows are shown at 24fps.

❖ **Photo mapping**

Overlaying a photo image on a 3D object, so that the photo takes the shape of that object.

❖ **Z-buffer**

A two dimensional array made up of a grid of points on a sea-level plane, each containing the value of the depth (z) at that point. This way every pixel on the monitor has a "depth value" so that the program knows which polygons are in the foreground and which are in the background.