

### Overview

## NVIDIA GeForce2 MX400 Graphics Controller

### Models

DC155A (with DDR frame buffer memory)

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### Introduction

The HP NVIDIA GeForce2 MX400 Graphics Controller is the low-cost, entry member of NVIDIA's GeForce2 family of products. In addition to excellent value, the GeForce2 MX400 offers robust 2D graphics performance. This particular option kit offers single head analog VGA output. The DC155A GeForce2 MX400 is an AGP-4X ATX form factor board incorporating 32 MB DDRAM with a single VGA output port to drive an analog display.

The HP NVIDIA GeForce2 MX 400 is suited for bid situations where a low-cost dedicated graphics solution is required as a deployment alternative to the Intel integrated graphics provided by either i845G or i865G-based desktops.

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### Performance

The NVIDIA GeForce2 MX400 graphics solution incorporates 32-MB DDRAM of unified frame buffer and texture memory. Key performance features of this solution include the ability to render up to 25M triangles/second and a peak fill rate of 700M texels/second for real-time rendering of complex-shaded and textured models. The GeForce2 MX400 delivers 1030 fps for 2D Winbench99 (High End), 369 fps for 2-D Winbench 99 (Business), 1230 fps for 3-D Winbench99 and 153 fps for 3-D Winbench 2000 at 16-bit color depth on an 800 MHz Pentium III system.

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### Key Features

The NVIDIA GeForce2 MX400 provides optimized support for DirectX and OpenGL 1.2 applications under Microsoft® Windows® 98, Microsoft Windows NT® 4.0, Microsoft Windows 2000 and Microsoft XP Pro. The GeForce2 MX400 Option Kit contains a graphics board (HP Part Number 306959-001 with DDR) with ATX bracket attached, a replaceable low-profile bracket for the SFF chassis, a CD with NVIDIA drivers for Microsoft Windows XP, 2000, Microsoft Windows NT, and Microsoft Windows 98 Operating Systems, and a HP warranty notice.

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### Compatibility

The NVIDIA GeForce2 MX400 Graphics Controller is compatible with HP Compaq Business Desktop d230, d330 and d530 series PCs (except the d530 ultraslim desktop).

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### Service and Support

The NVIDIA GeForce2 MX400 Graphics Controller has a one-year limited warranty or the remainder of the warranty of the HP product in which it is installed. Technical support is available seven days a week, 24 hours a day, by phone as well as online support forums. Certain restrictions and exclusions apply.

### Technical Specifications

<b>Vertical frequency</b>	60-85 Hz
<b>Graphics controller</b>	NV11
<b>Bus type</b>	AGP 4X
<b>RAMDAC</b>	Integrated 350-MHz RAMDAC
<b>Memory type</b>	SDRAM
<b>Memory amount</b>	32-MB unified frame buffer and texture memory
<b>Maximum memory</b>	32 MB
<b>Memory speed</b>	166 MHz
<b>Data path</b>	256 bit
<b>Controller clock speed</b>	175 MHz
<b>Maximum vertical refresh rate</b>	85 Hz
<b>Maximm pixel clock</b>	350 MHz
<b>Graphics API support</b>	OpenGL 1.2, DirectX 7
<b>Operating systems support</b>	Microsoft Windows 2000, Microsoft Windows NT 4.0, and Microsoft Windows 98
<b>Buffer</b>	96-bit (per pixel)
<b>Image planes</b>	24-bit double buffered
<b>Z-buffer</b>	32-bit (24-bit with stencil planes)
<b>Overlay</b>	Supported
<b>Stencil planes</b>	8-bit (maximum)
<b>Alpha planes</b>	8-bit
<b>External interface</b>	Analog Video Output port-the video port (female, 15-pin, D-SUB connector) provides connection to an analog display

<b>Resolutions supported</b>	<b>Resolution</b>	<b>Refresh Rate/Hz</b>	<b>High Color</b>	<b>True Color</b>
	2048 x 1536	75	Yes	No
	1920 x 1440	85	Yes	No
	1920 x 1440	75	Yes	Yes
	1920 x 1200	85	Yes	Yes
	1920 x 1080	85	Yes	Yes
	1792 x 1120	85	Yes	Yes
	1600 x 1280	85	Yes	Yes
	1600 x 1200	85	Yes	Yes
	1600 x 1000	85	Yes	Yes
	1536 x 960	85	Yes	Yes
	1280 x 1024	85	Yes	Yes
	1152 x 864	85	Yes	Yes
	1024 x 768	85	Yes	Yes
	800 x 600	85	Yes	Yes
	640x 480	85	Yes	Yes

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