

### Overview

### Models

NVIDIA Quadro 3000M 2GB Graphics

A2HG99AV

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### Introduction

The NVIDIA Quadro® 3000M graphics board (N12E-Q1 / P1044) is a graphics processing unit (GPU) module designed using the MXM™ version 3.0 Type B specification. This graphics board is targeted for upper midrange professional 3D workstation graphics applications.

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### Performance and Features

Supported on HP Z1 workstation.

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### Service and Support

The NVIDIA Quadro 3000M 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. Parts and labor are available on-site within the next business day. Telephone support is available for parts diagnosis and installation. Certain restrictions and exclusions apply.



### Technical Specifications

<b>Form Factor</b>	MXM v3.0 Type B (82mm x 105mm)
<b>Graphics Controller</b>	N12E-Q1, 450MHz core clock
<b>Bus Type</b>	PCI Express x16 (part of MXM v3.0 connector)
<b>Memory</b>	2GB GDDR5, 256-bit wide interface, 1250MHz
<b>Connectors</b>	One MXM v3.0 connector (285-pin)
<b>Maximum Resolution</b>	2 x 2560x1600 @ 60Hz digital displays In Z1 application: - Internal Display: 2560x1440 - External Display via DP connector: 2560x1600
<b>RAMDAC</b>	Not Applicable
<b>Image Quality Features</b>	Capable of 10-bit per channel (3 channels) internal display processing, including hardware support for 10-bit per channel scan-out 64-bit texture filtering and blending Advanced vertex and pixel shaders, antialiasing, 16x anisotropic filtering MPEG-2 HD and WMV HD video playback (1920x1080p) H.264 hardware decode acceleration AES-128 CTR/CBC/ECB decryption modes supported Advanced video algorithms NVIDIA Digital Vibrance Control 3.0
<b>Shading Architecture</b>	Shader Model 5.0 support 240 processor cores
<b>Supported Graphics APIs</b>	Full IEEE 764-2008 32-bit or 64-bit precision DirectX 11.0 Shader Model 5.0 OpenGL 4.0 Compute API support for NVIDIA CUDA C, CUDA C++, DirectCompute 5.0, OpenCL, Java, Python and Fortran
<b>Available Graphics Drivers</b>	Windows 7 32-bit and 64-bit SUSE Linux Enterprise Desktop 11 HP Linux Installer Kit  See <a href="http://www.hp.com/go/support">www.hp.com/go/support</a> for HP supported NVIDIA graphics drivers
<b>Power Consumption</b>	75W

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