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FOR IMMEDIATE RELEASE

Xi Graphics, Inc. Releases Graphics Software Support for Wildcat[®] VP Cards

New graphics drivers run on many Linux/UNIX operating systems.

DENVER, June 18, 2003 ---- Xi Graphics, Inc. announced today that it has released commercial-off-the-shelf graphics drivers and X servers that support 3Dlabs' Wildcat VP line of graphics cards that employ the "P10" graphics chips incorporating the new "Visual Processing Architecture" announced by 3Dlabs last year.

The new Accelerated-X™ Summit v2.2 graphics drivers, developed in cooperation with 3Dlabs, provide support for quad-buffered stereo, hardware overlay planes, DualView, Full Scene Anti-aliasing (FSAA), accelerated accumulation buffers, Pbuffers, 32-bit Z-buffer, and OpenGL 1.3 on current models of Wildcat VP cards with P10 graphics.

The Summit v2.2 Wildcat VP graphics drivers are the first drivers from Xi Graphics that support "an optimized graphics pipeline, replacing previously inflexible pipeline stages with highly programmable SIMD . . . processor arrays" (3Dlabs press release May 2, 2002). The new variable graphics pipeline architectures now available from the major graphics chip manufacturers offer professional workstation graphics users the ability to dramatically increase the visual realism of computer generated images by directly controlling the characteristics of the graphics rendering stages in the hardware to create stunning images that can be hardware accelerated.

A P10 Visual Processing Unit has over 200 micro-programmable 32-bit RISC processors that are controlled by the graphics driver - including 16 for geometry processing, 128 for texture processing, and 64 for pixel processing. Arranged as SIMD arrays, each of these 32-bit

microprocessor sets executes a single instruction on 16, 64, or 128 data elements respectively. The current Wildcat VP drivers released by Xi Graphics do not expose the OpenGL extensions that allow vertex programming at this time: this capability will be provided in a subsequent release of the drivers.

"This radical new VPU architecture from 3Dlabs is by far the most complicated graphics hardware that we have supported in the past nine years or so," according to Thomas Roell, a founder and CTO of Xi Graphics. "We had to almost completely re-do the Accelerated-X Summit OpenGL pipeline software base to incorporate support for new variable pipeline architectures such as the P10," Roell continued. "Supporting the 200 odd on-board RISC microprocessors on the P10 that allow on-the-fly optimized compiling of vertex programs was particularly challenging. This task made the previous Wildcat III drivers we did seem like child's play. Not only that, we also had to support many operating systems out of the box, and had to design our driver architecture knowing that we would soon be supporting CPU architectures other than 32-bit Intel/AMD."

Operating systems supported by this first Accelerated-X Summit v2.2 release of Wildcat VP drivers includes Linux distributions from Red Hat (through version 9.0), S.u.S.E. (through version 8.1), Mandrake (through version 9), Slackware (through version 9), and UNIX operating systems Solaris (on Intel) through version 9, and FreeBSD (through version 4.5). Additional operating system support is available for custom/OEM projects with short lead times.

"The move to variable, or on-the-fly microprogrammable rendering pipelines for OpenGL on low- and mid-range graphics cards was quite a step from a graphics driver development standpoint," stated Jon Trulson, Xi Graphics' engineering manager. "A spokesman for one of the major graphics chip manufacturers was recently quoted as saying that the development of graphics drivers for a variable graphics pipeline was so difficult that it was unrealistic to think that third-party graphics developers could write drivers for them. Well, we at Xi Graphics thrive on difficult graphics challenges. Despite the level of complexity involved, the first release of the Wildcat VP drivers not only runs on several UNIX and UNIX-like operating systems, their

overall performance is on a par with the performance of the current Windows drivers from 3Dlabs. Not bad for a third-party driver developer, I'd say," Trulson said.

Benchmark data for the Wildcat VP Linux drivers are posted on the Xi Graphics Web site.

Fully-functioning workstation demos of Accelerated-X Summit v2.2 Workstation (WX) Series Wildcat VP graphics drivers are available for download and testing from Xi Graphics' Web site, www.xig.com. License Keys to convert the Summit v2.2 demos to permanent product can be purchased on-line. Prices for the License Keys range from \$119, depending upon the card. Quantity discounts are available.

Customer support, which the Company claims is prompt, courteous and competent, is also free via phone and e-mail to its Denver, Colorado facilities.

About Xi Graphics, Inc.

Xi Graphics, Inc. has developed commercial accelerated graphics drivers and X servers for the X Window System on Linux and UNIX® systems since 1994. For information on the Company, visit www.xig.com.

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