Windows
Accelerator Cards

The Windows accelerator cards that qualified for the PC/Computing 200 have fixed-function
processors, which accelerate Windows by offloading common graphics functions from the PC's
CPU. The boards we looked at have an S3, a Weitek, or an ATI Mach 8 accelerator chip, and all
support resolutions of at least 1,024 by 768. We also requested that the boards come with at least
1MB of memory (except for cards based on the Weitek chip, which come configured with 512K).

Product

Diamond Stealth VRAM
Diamond Computer Systems
532 Mercury Dr.
Sunnyvale, CA 94086
(408) 736-2000
Price: $445

Orchid Fahrenheit 1280
Orchid Technology
45365 Northport Loop West
Fremont, CA 94538
(800) 767-2443
(510) 683-0300
Price: $449

ATI Graphics Ultra
ATI Technologies
3761 Victoria Park Ave.
Scarborough, Ontario M1W 3S2
(416) 756-0718
Price: $699

ATI Vantage
ATI Technologies
3761 Victoria Park Ave.
Scarborough, Ontario M1W 3S2
(416) 756-0718
Price: $449

Portacom Eclipse II
Portacom Technologies
3235 Kifer Rd., Suite 310
Santa Clara, CA 95051
(408) 736-9135
Price: $349

GraphicsEngine VGA
Actix Systems
4633 Old Ironsides Dr., Suite 310
Santa Clara, CA 95054
(800) 927-5557
(408) 986-1625
Price: $349

STB Wind/X Ultra
STB Systems
1651 Glenville, Suite 210
Richardson, TX 75081
(800) 234-4334
(214) 234-8750
Price: $439

NDI Volante AT600
National Design
9171 Capital of Texas Hwy.
Houston Building, Suite 230
Austin, TX 78759
(800) 253-8831
(512) 343-5055
Price: $395

MaxGraphics
CSS Laboratories
1641 McGaw Ave.
Irvine, CA 92714
(800) 966-2771
(714) 852-8161
Price: $395

WindowsVGA 3000 Series
Genoa Systems Corp.
75 E. Trimble Rd.
San Jose, CA 95131
(408) 432-9090
Price: $465 or $495

Weitek Power for Windows
Weitek
1060 E. Arques
Sunnyvale, CA 94086
(800) 845-0150
(408) 738-8400
Price: $299

GraphTek

AvTech Development
1001 S. Placentia Ave.
Fullerton, CA 92631
(800) 886-5880
(714) 773-5880
Price: $249

Evaluation	Score
Consistently high performance scores are the trademark of the Diamond Stealth VRAM board. Built around the S3 accelerator chip, the Stealth comes standard with a Sierra HiColor RAM DAC. It supports up to 32,768 colors at 640 by 480, 256 colors at 800 by 600 and 1,024 by 768, and 16 colors at 1,280 by 960 in Windows. Diamond backs the Stealth with a five-year warranty.	91.50
Exceptionally easy to install and configure, the Orchid Fahrenheit 1280 supports 16 colors at 1,280 by 960, up to 256 colors at 800 by 600 and 1,024 by 768, and up to 32,768 colors at 640 by 480. The Fahrenheit is built around the S3 accelerator chip. Installing the card is a snap, thanks to Orchid's excellent installation utility. The Fahrenheit is backed by a four-year warranty.	88.50
Though it's the most expensive board we tested, ATI's Graphics Ultra is worth every penny. Based on ATI's own Mach 8 chip, the Graphics Ultra is especially fast at rendering graphics in Windows and at running non-Windows applications in standard VGA mode. It supports 16 colors at 1,280 by 1,024 and up to 256 colors at 1,024 by 768, 800 by 600, and 640 by 480. Other pluses: a mouse and built-in mouse port. The Graphics Ultra comes with a five-year warranty.	83.50
An intelligent choice for anyone who needs speed for both Windows and non-Windows applications, the ATI Vantage supports 256 colors at 640 by 480, 800 by 600, and 1,024 by 768 and 16 colors at 1,280 by 1,024. The ATI Vantage is identical to the ATI Graphics Ultra except that it uses slower, less-expensive DRAM instead of VRAM and costs $250 less. The ATI Vantage comes with a five-year warranty.	81.50
Inexpensive and fast, the Portacom Eclipse II supports up to 65,536 colors at 640 by 480, 256 colors at 800 by 600 and 1,024 by 768, and 16 colors at 1,280 by 960 in Windows. If you don't need the extra colors at 640 by 480, you don't have to pay for themPortacom offers a $325 model that supports up to 32,768 colors at 640 by 480 and a $299 version that supports 256 colors at 640 by 480. Portacom warrants the Eclipse II for five years.	81.50

A solid all-around performer, the GraphicsEngine VGA supports 16 colors in 1,280 by 960 in Windows, up to 256 colors at 800 by 600 and 1,024 by 768, and up to 32,768 colors at 640 by 480. Actix's board uses the S3 accelerator chip and comes with a one-year warranty and toll-free tech support. A version with just 512K of memory is available for $299.   81

Built around the S3 chip, STB's Wind/X Ultra displays 16 colors at 1,280 by 960, 256 colors at 800 by 600 and 1,024 by 768, and up to 32,768 colors at 640 by 480. The Wind/X Ultra also includes a mouse port and a Logitech Mouseman. STB sells a version of the board without mouse port and mouse for $379. STB offers toll-free tech support and a two-year warranty on this board.   80.50

This S3-based board not only speeds up text and graphics in Windows but also adds color, supporting up to 32,768 colors at 640 by 480. The NDI Volante AT600 displays up to 256 colors at 800 by 600 and 1,024 by 768. NDI warrants the board for two years and offers toll-free technical support.   80

Another S3-based board, CSS's MaxGraphics supports 16 colors at 1,280 by 960 and 256 colors at 640 by 480, 800 by 600, and 1,024 by 768. It's backed by an 18-month warranty and toll-free technical support.   78.50

This board comes in two configurations: a standard RAM DAC version ($465) and a Sierra DAC model ($495). Based on the S3 chip, both models support up to 16 colors at 1,280 by 960 and 256 colors at 640 by 480, 800 by 600, and 1,024 by 768. The Sierra model also supports up to 32,768 colors at 640 by 480. Both boards come with a one-year warranty.   78.50

Although it isn't as fast as the S3 boards here (you'll speed Windows by a factor of three to five instead of five to ten), Weitek Power for Windows is still a big improvement over a standard VGA board, and it's affordable. The Weitek holds 512K of VRAM and supports 16 colorsall that many business users needat resolutions of 640 by 480, 800 by 600, and 1,024 by 768. Weitek warrants the board for three years.   75

Another Weitek-based board, the AvTech GraphTek comes with 512K   74

of memory and supports 16 colors at resolutions of 640 by 480, 800 by 600, and 1,024 by 768. It's backed by an 18-month warranty and toll-free technical support.