Super VGA Cards

The Super VGA cards that met the requirements for the PC/Computing 200 support resolutions
of at least 1,024 by 768 pixels and high refresh rates in at least one resolution (72Hz at resolutions
of 800 by 600 or 640 by 480, or 70Hz at 1,024 by 768). All the cards include a 256-color Windows
driver and 1MB of onboard RAM. The category covered 8-bit (256-color), 15-bit (32,768-color),
and 16-bit (65,536-color) cards. All the products tested are frame-buffered (noncoprocessed) boards.

Product

Super X VGA
Boca Research
6413 Congress Ave.
Boca Raton, FL 33487-2841
(407) 997-6227
Price: $235

VGAWonder XL
ATI Technologies
3761 Victoria Park Ave.
Scarborough, Ontario M1W 3S2
(416) 756-0718
Price: $299

2 the Max VGA4000 Plus
Focus Information Systems
4046 Clipper Court
Fremont, CA 94538
(800) 925-2378
(510) 657-2845
Price: $220

Lightning VGA
Sota Technology
559 Weddell Dr.
Sunnyvale, CA 94089
(800) 933-7682
(408) 745-1111
Price: $390

Renoir Ultra-SVGA
Add-On America
433 N. Mathilda Ave.
Sunnyvale, CA 94086-4222
(800) 292-7771
(408) 746-1590
Price: $299.95

Spectrum
Actix Systems
4633 Old Ironsides Dr., Suite 310
Santa Clara, CA 95054
(800) 927-5557
(408) 986-1625
Price: $219

Ultra Image HiColor
United Solutions
6382 Arizona Circle
Los Angeles, CA 90045
(800) 365-4995
(310) 645-3232
Price: $199

SpeedStar Hi-Color VGA
Diamond Computer Systems
532 Mercury Dr.
Sunnyvale, CA 94086
(408) 736-2000
Price: $299

SigmaVGA Legend II
Sigma Designs
47900 Bayside Pkwy.
Fremont, CA 94538
(800) 845-8086
(510) 770-0100
Price: $399

VGA765
Cardinal Technologies
1827 Freedom Rd.
Lancaster, PA 17601
(800) 233-0187
(717) 293-3000
Price: $399

Hi-Color Turbo VGA Card
Micro Express
1801 Carnegie Ave.
Santa Ana, CA 92705
(800) 989-9900
(714) 852-1400
Price: $185

Viewpoint Premium

Everex Systems
48431 Milmont Dr.
Fremont, CA 94538
(800) 821-0806
(510) 498-1111
Price: $339

ProDesigner IIs
Orchid Technology
45365 Northport Loop West
Fremont, CA 94538
(800) 767-2443
(510) 683-0300
Price: $369

Ultimate VGA\HiColor\65K
Micro-Labs
7309 Campbell Rd.
Dallas, TX 75248
(214) 702-8654
Price: $295

AView 1
Advanced Integration Research
2188 Del Franco St.
San Jose, CA 95131
(408) 428-0800
Price: $135

Evaluation	Score

The fastest board we tested, the $235 Super X VGA from Boca 86
Research was also one of the most reasonably priced. The Super X VGA
supports resolutions of up to 1,024 by 768 pixels with 256 colors, comes
with a high-color digital-to-analog converter (DAC), and displays as many
as 32,768 colors at resolutions of 640 by 480 and 800 by 600. If you
don't need high-color capability, you can get the SuperVGA for $25 less
it's the same board minus the driver for 32,768 colors. The Super X VGA
is warranted for five years.

ATI's VGAWonder XL is one of the friendliest products in its class. The
board comes with a handy installation utility, and we didn't have to fuss with
jumpers or dip switches to configure it. The VGAWonder displays as many 83.0
as 256 colors at 1,024 by 768 and 32,768 colors at 640 by 480 and
800 by 600. The VGAWonder comes with a five-year warranty.

A relative bargain at $220, Focus's 2 the Max VGA4000 Plus supports 79.50
1,280-by-1,024-pixel resolution with 16 colors. It also displays up to 65,536
colors at 640 by 480, 32,768 colors at 800 by 600 and 256 colors at
1,024 by 768. The only drawback is that installation is trickythere's no
driver-installation utility, and you have to contend with hardware switches
to configure the board. A two-year warranty is included.

Easy to install and configure, the Lightning VGA from Sota Technology
performed as well as the ATI VGAWonder XL. It supports resolutions of up
to 1,280 by 1,024 with 16 colors (one step above the ATI), but you'll have
to decide if it's worth the extra cost. At $390, the Lightning VGA was one78.0
of the more expensive boards in this category. It comes with a two-year
warranty, and the company provides toll-free technical support.

Another high-resolution card that supports 16 colors at 1,280 by 1,024
pixels is the Renoir Ultra-SVGA. It performed as well as the Focus card but
was slightly more difficult to install and configure. It comes with a high-color
RAM DAC and supports as many as 32,768 colors at resolutions of 80078.0
by 600 and 640 by 480, and 256 colors at 1,024 by 768. It comes with a
five-year warranty.

Priced at $219, the Spectrum from Actix Systems wasn't the speediest
board we looked at, but it had a lot of good qualities. It was relatively easy
to install and supports as many as 256 colors at 1,024-by-768 resolution
and 32,768 colors at 800 by 600 and 640 by 480. The Spectrum is 77.5
guaranteed for one year and includes toll-free technical support.

If you need an inexpensive board that supports 1,280-by-1,024
resolution, includes a high-color RAM DAC, and is speedier than average,
United Solutions' Ultra Image HiColor is a good choice. Its only liabilities
are that it's difficult to install and the documentation isn't of much assistance. 77.0
Though the company lacks a BBS for downloading driver updates, it will
send them to you free by mail. Calls to technical support are toll free, and
a lifetime warranty is included.

True to its name, the SpeedStar was one of the fastest cards in this
category. It supports 256 colors at a resolution of 1,024 by 768 and
32,768 colors at 800 by 600 and 640 by 480. The SpeedStar doesn't
provide much help with installation (there's no driver-installation utility, and 74.0
you may have to set jumpers to configure the board), but the documentation
is clear and helpful. It comes with a five-year warranty.

The SigmaVGA Legend II comes with a high-color RAM DAC. It's as   73.50
fast as the Ultra Image HiColor and is slightly easier to install. The board
supports as many as 256 colors at a resolution of 1,024 by 768 and up to
32,768 colors at 800 by 600 and 640 by 480. Sigma backs the board
with a five-year warranty and toll-free support. The only disadvantage is the
Legend II's $399 price tag, which makes it one of the costlier boards
in this class.

A high-scoring performer, the VGA765 displays 16 colors at the   73.50
highest resolution of 1,280 by 1,024. And, with the high-color RAM DAC,
it even supports up to 65,536 colors at 640 by 480 and 800 by 600.
You'll pay more for this additional color capability, however the VGA765
costs $399. Cardinal offers a one-year warranty and toll-free support.

It's one of the lowest priced cards in this category, but the Micro
Express Hi-Color Turbo VGA Card turned in an above-average performance.
It supports as many as 256 colors at 1,024-by-768 resolution and up to
32,768 at 800 by 600 and 640 by 480. But the card can be tricky to
install, and the company doesn't operate a BBS for tech support and down-
loading drivers. Driver updates are available by mail, however. Micro
Express warrants the board for seven years.

Everex's Viewpoint Premium wasn't the fastest board we tested, but

it earned top marks in other areas. It supports 16 colors at 1,280-by-1,024
resolution, 256 colors at 1,024 by 768 and 800 by 600, and 32,768 colors
at 640 by 480. The Viewpoint Premium comes with a two-year warranty.72.0

One of the easiest boards to install and configure was the Orchid
ProDesigner IIs. It has many of the strengths of ATI's VGAWonder XL and a
slightly higher price. It supports as many as 256 colors at a resolution of
1,024 by 768 and 32,768 colors at 800 by 600 and 640 by 480. Orchid 71.0
guarantees the ProDesigner IIs for four years and provides toll-free support.

If its color you want, Micro-Labs' Ultimate VGA supports 65,536 colors
at a resolution of 640 by 480 and 32,768 at 800 by 600. The Ultimate
VGA\HiColor\65K displays up to 256 colors at 1,024 by 768 and 16
colors at 1,280 by 1,024. The board comes with a three-year warranty.70.0

At only $135, the AView 1 is worthy of consideration. It supports up to
32,768 colors at 640 by 480 and 800 by 600 and up to 256 colors at
1,024 by 768. You dont get a lot of frills with the AView 1: Theres no
installation utility, and AIR doesn't have a BBS for tech support and drivers 67.0
(though driver updates are available by mail). Even so, the AView 1 turns
in respectable performance at a rock-bottom price. AIR warrants the AView
1 for one year.