## **ORCHID TurboPGA**<sup>m</sup>



- Single-slot, single-board design
- Compatible with the IBM PGC
- ▲ Up to 100 times faster than the IBM PGC
- ▲ 640 x 480 resolution
- ▲ 256 colors from a palette of 262,144
- ▲ 3-D & 2-D commands
- Hardware pan and 4-level zoom
- ▲ Half of IBM's price

## **TurboPGA:**

## High-Speed, Low-Cost Professional Graphics Adapter for IBM ATs

Orchid's TurboPGA is the first low-cost Professional Graphics Adapter that is compatible with IBM's high-resolution professional graphics standard. The TurboPGA has the added benefit of greater speed because it uses an on-board 8MHz 80186 processor. This results in a speed increase of up to 100 times over IBM's board with an average increase of about 5 times.

With a resolution of 640 x 480, a palette of over a *quarter of a million colors*, and high-speed graphics, the TurboPGA is an excellent choice for all applications. CAD, graphic art, medical and geological imaging, industrial controlling, and scientific development are just a few areas that can benefit from the TurboPGA. For the serious CAD user, TurboPGA already supports all major software such as: AUTOCAD, VERSACAD, ANVIL 1000MD, CADVANCE, P-CAD, MICRO CADAM and more.

When you base your graphics workstation around the TurboPGA, you get more than a low-cost, high-performance graphics board. You get the benefit of going with the industry standard, the same standard used by IBM. TurboPGA ends the compatibility and obsolescence worries associated with non-standard boards. Make an investment that gives you confidence—Orchid's TurboPGA.

#### **Greater Monitor Flexibility**

To maximize flexibility, the Turbo PGA gives you two choices instead of on-board CGA emulation:

#### Single Monitor Non-dedicated Graphics Workstation

The TurboPGA allows you to connect the output of your own EGA\* or CGA card into the TurboPGA. With the TurboPGA connected to a variable-sync monitor, you can switch between PGA output and your other video card's output on the fly. This allows you to use your workstation for more general applications such as word processing or spread sheets. This way you can get the maximum usage from your investment.

#### Dual Monitor Professional Style Workstation

You can use the TurboPGA with a standard IBM-PGC-compatible monitor such as the Amdek 730. This allows a separate monitor with its compatible video adapter to give you a continuously displayed text screen, similar to professional dedicated CAD systems. Many people use the second monitor to display commands, help screens, and other computer applications.

\*EGA cards require optional Orchid Digital-to-Analog Converter or Orchid's EGA daughtercard.

# TurboPGA

### **Technical Specifications:**

Output:

Analog

Horizontal scan frequency: Vertical scan frequency: 30.48 KHz 60 Hz non-interlaced

When used in conjunction with other video cards and a variable-sync monitor, the horizontal and vertical scan frequencies will equal that of the other cards while they are in use.

Power consumption: Drawing speeds: Drawing rate 2-D (10 cm H. & V. lines) 3-D (Rotating Cube) Solids (Circle) Standard Text (8 x 12)

Colors: Display RAM: Communications buffer: Processor: 4.5 amps

30,000,000 pixels/sec. 5000 vectors/sec. 320 vectors/sec. 8,380,000 pixels/sec. 14,800 characters/sec.

256 displayable out of 262,144 320 kilobytes 4 kilobytes 8MHz 80186

#### **Features:**

- Zero wait-state, 16-bit host interface
- VDI compatible
- Directly accessible display memory through 3K movable window

Operating Temperature: 0–55°C

