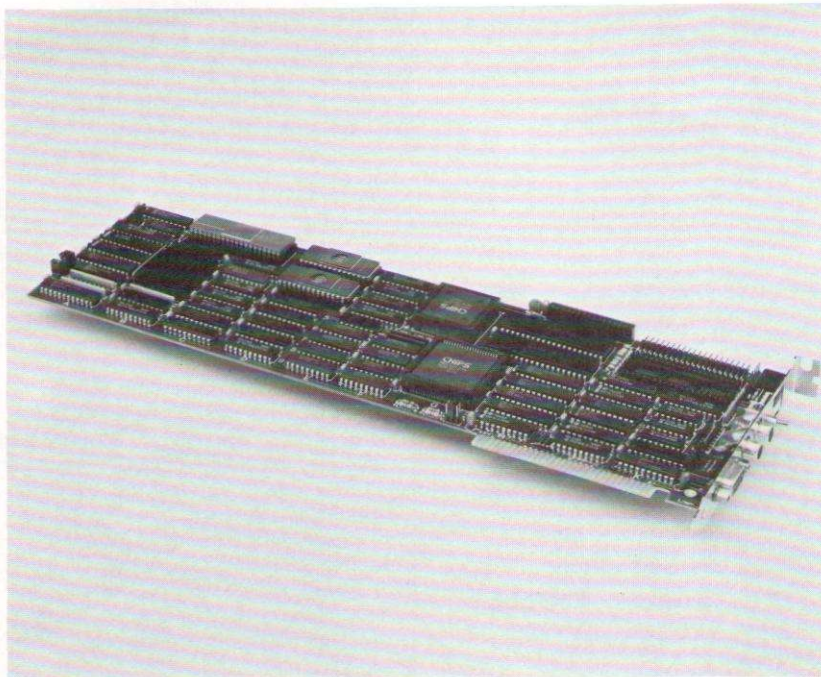


# ORCHID TurboEGA™



## TurboEGA

### Enhanced Graphics Adapter and High-Speed Accelerator for IBM PCs and XT's

### The Perfect Microsoft Windows™ Engine

Orchid's TurboEGA is the complete solution. We took our popular TinyTurbo 286™ accelerator and our Orchid EGA™ card and combined them onto one card to give you three times more speed and beautiful graphics. Now power-hungry programs can run on a PC. There's even a socket for an optional 80287 math processor. TurboEGA packs all of these functions into one slot at an affordable price.

**Speed, Simplicity, Savings** - TurboEGA upgrades your PC or XT to the performance of an IBM AT without the complications of transferring files to a new system. TurboEGA is transparent to the user so you don't have to spend hours learning how to use a new system—just plug in the TurboEGA and go. You save time and money and get AT speed for running high-powered programs like Microsoft Windows. The increase in productivity will pay for the TurboEGA in just a few weeks.

**Superb Graphics and Text** - TurboEGA is four video boards in one to give you full compatibility with the IBM EGA, CGA, MDA, and the Hercules Graphics card. It gives you the industry's breathtaking new standard: EGA color graphics with 640 x 350 resolution and 16 colors displayable out of a palette of 64. And you get full-color text with an 8 x 14 character cell on the IBM Enhanced Color Display or monochrome text in a 9 x 14 character cell on a monochrome display.

**Applications** - The high-speed, high resolution TurboEGA speeds up all types of software so you'll finish your work more quickly. It's perfect for supercharging CAD programs such as AutoCAD, P-CAD, VersaCAD, CADVANCE, MICRO CADAM, or drafix. Data bases like dBASE and VP-info sort with the speed of an AT. Lotus 1-2-3 and SuperCalc 3 calculate up to 3 times faster. If you use Freelance, Energraphics, Diagraph, or other presentation graphics packages, you won't have to sit and wait for your graphic displays. With painting programs like PC Paint Plus, EGA Paint, or Windows Paint™, graphic artists can let their creativity flow instead of waiting for their PCs'. And word processing with Word Perfect or Windows Write™ is executed without hesitation.

## ACCELERATOR

- ▲ Supercharges a PC or XT to run Faster than an IBM-AT
- ▲ 80286 runs applications from high-speed cache on its 16-bit bus
- ▲ Speeds up graphics, networks, spreadsheets, EMS memory, data bases
- ▲ 8088 processor stays in the system for 100% compatibility

## GRAPHICS

- ▲ Four-in-one graphics board: EGA, CGA, MDA and Hercules compatibility on a single board
- ▲ 256K graphics RAM comes standard
- ▲ High-resolution color graphics: 640 x 350 resolution; 16 colors displayable out of a palette of 64

Benchmark	IBM XT	IBM AT	TurboEGA
AutoCAD Nozzle Regen	202	102	82/17.6*
Spreadsheet Calculation	44	15	14
Data Base Sort	25.4	13.4	14.9
PC Paint Plus Fill Screen w/Color	109	42	37

(Time in seconds)

\* With 5 MHz 80287 installed

# ORCHID TurboEGA™

## Technical Specifications

System Requirements: IBM PC, XT or 8088-based compatible

Monitors (TTL): ECD ..... Enhanced Color Display (IBM 5154)  
 21.85KHz & 15.75KHz H. scan  
 CD ..... Color Display (IBM 5153)  
 15.75KHz H. scan  
 MD ..... Monochrome Display (IBM 5151)  
 18.43KHz H. scan

Standards Supported: EGA ..... Enhanced Graphics Adapter  
 CGA ..... Color Graphics Adapter  
 MDA ..... Monochrome Display Adapter  
 HGC ..... Hercules Graphics Card

Modes:	Text Modes	Char Cell	Colors	Screen Format	Required Monitor
	EGA	8 x 14	16/64	80 x 25	ECD
	CGA	8 x 8	16	80 x 25	ECD, CD
		8 x 8	16	40 x 25	ECD, CD
	MDA	9 x 14	2	80 x 25	MD
	HGC	9 x 14	2	80 x 25	MD

	Graphics Modes	Graphics Resolution	Colors	Screen Format	Required Monitor
EGA		640 x 350	16/64	80 x 25	ECD
		640 x 350	4/64	80 x 25	ECD
		640 x 200	16	80 x 25	ECD, CD
		320 x 200	16	40 x 25	ECD, CD
CGA		640 x 350	2	80 x 25	MD
		320 x 200	4	40 x 25	ECD, CD
		320 x 200	2	40 x 25	ECD, CD
		640 x 200	2	80 x 25	ECD, CD
MDA		720 x 348	2	80 x 25	MD
HGC		720 x 348	2	80 x 25	MD

Size: Full length, single board

Connectors: DB-9 for Video output  
 Feature connector with 2 RCA jacks  
 Berg strip for light pen

CPU: 8MHz 80286 operating at 7.2MHz  
 Socket for PC's original 8088

Cache: 8 kilobytes RAM

Software: Diskette provided for Hercules and CGA emulation

Math: Socket for optional 5MHz or 8MHz 80287 floating point math processor (highly recommended for best CAD performance)

BIOS: 300% faster than the IBM EGA BIOS

## Quality Engineering

Orchid TurboEGA was designed and built by Orchid in the U.S. We took our time to engineer a quality solutions oriented product. We back our TurboEGA with a one-year warranty and have a dedicated support staff standing by to assist you. These are the qualities that makes Orchid the leader in innovative PC add-ons.

## How the TurboEGA Supercharges Your Applications

A ribbon cable runs from the TurboEGA to your host computer's 8088 socket. Plug the original 8088 into the socket on the TurboEGA. A rear-panel switch toggles between the 8088 and the 80286 processors to alleviate any compatibility problems. With the switch in Turbo mode, the TurboEGA's 80286 processor turbo-charges your 8-bit PC or XT with a high-speed 16-bit processor.

*If you already have an AT but need the benefits of an EGA then Orchid also has the Orchid EGA with the same four video board compatibility.*



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