from NSI Logic

Extended EGA Plus High Resolution and VGA Graphics

PLUS

The Graphics Adapter Designed For Your Multisynchronous Monitor

NSI Logic's SMART EGA PLUS is designed to drive your multisynchronous monitor to the limit. It not only supports both 640 x 480 and 752 x 410 Extended EGA modes, but high resolution 800 x 600 graphics mode, which puts over twice as many pixels on the screen as standard EGA mode. With the SMART EGA PLUS, your multisynchronous monitor will display high performance softwarefrom desktop publishing to CAD-the way it should be: at the highest possible resolution. And the SMART EGA PLUS is software compatible with the VGA 640 x 480 standard of the IBM Personal System 2. So you will have access to new software as it is released for the PS/2, thus protecting the investment you have made in your system. And of course, the SMART EGA PLUS runs MDA, Hercules, CGA, 132 column text and EGA software on an Enhanced Color Display or multisynchronous monitor.

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The SMART EGA Just Got Smarter

Because it's a SMART (Single Monitor AdaptoR Technology) design, you can display everything from Hercules monochrome graphics to high resolution color graphics on your multisynchronous monitor. NSI's exclusive Mode Save feature allows you to switch back and forth between modes from the keyboard, without having to reset any switches, and without any of the compatibility problems which can arise with automatic switching schemes. And Palette Save gives you the power to "lock in" your color selections from one program to the next, even through system warm boots!

The VLSI Solution

At the heart of the SMART EGA PLUS is NSI's proprietary VLSI (Very Large Scale Integation) graphic controller chip that meets all IBM specifications while providing complete hardware emulation of all supported PC display modes, without any special patches or RAM resident programs. Add to it the maximum amount of video RAM possible, plus a feature connector and video input/output connectors for future expansion — all on a compact, half length expansion card. It all adds up to a clean, reliable design. And NSI Logic warrants the SMART EGA PLUS against manufacturing defects for a full three years. Made in the U.S.A.



Display Mode Support

- Hardware support of MDA, CGA and EGA display modes — For compatibility with all major IBM PC display adapters
- Hardware support of Hercules (HGC) Full and Half modes (displayable in color) — Gives you access to an extensive base of graphics software
- Hardware support of 132 col x 25 line and 132 col x 43 line text modes — Lets you display up to 3 times the data than at standard EGA resolution
- Hardware support of both 640 x 480 and 752 x 410 Extended EGA resolutions; emulates other popular EEGA adapters — So you can run a wide variety of high performance software
- Hardware support of high resolution 800 x 600 graphics To fully utilize the performance of your multi-frequency monitors in CAD, desktop publishing, other high resolution applications
- Software support (via on-board BIOS) of IBM PS/2 VGA 640 x 480 resolution — For compatibility with PS/2 software using your PC with a multi-frequency monitor
- 16 colors from palette of 64 supported in all color modes — For a full range of color selections
- Drivers provided on disk for running popular programs at 640 x 480, 752 x 410, and 800 x 600 resolutions — To bring an immediate performance benefit to existing software

Convenience Features

- SMART MODE lets you run all display modes on a multisynchronous monitor (can be disabled) — One hardware configuration handles all your software requirements
- Keyboard mode change utilities provided

 So you don't have to manually reset switches
- MODE SAVE "locks in" selected mode; survives warm boots — Handy for your self-booting programs
- Palette SAVE lets you "lock in" 16 colors from a palette of 64; survives warm boots (may be disabled) — Lets you specify the colors you want for other programs
- Color for Hercules graphics (palette of 64) — To enhance your productivity
- Command to select hardware supported blinking or non-blinking cursors — Another way you can customize your computing environment

External Connectors/Controls

- SMART MODE enable/disable switch
- Switches for power on mode selection and primary/secondary adapter assignment
- I/O address port selection with BIOS ROM disable
- DB9 monitor connector
- RCA-type video input and output jacks
- IBM-type feature connector
- Light pen interface header



Performance Features

- NSI's proprietary EVC-315 graphic controller chip emulates all PC display modes in hardware; no software trapping (e.g., non-maskable interrupts) or RAM resident programs are used — For completely compatible, reliable performance
- Split-cycle timing scheme yields video memory accesses twice as fast as the IBM EGA — For faster screen updates; noticeable with applications that update screen often, such as CAD software
- Smooth horizontal and vertical scrolling — For less fatigue
- Fully expandable via feature connector, video in/out connectors — To support options or custom development
- Full 256K video RAM The maximum addressable video memory in PC systems
- Three year limited warranty For peace of mind

Compatible Modes Displays Supported	Multisync. Color	Dual Freq. Enhan. Color	Single Freq. Mono. (TTL)	Single Freq. Color (RGB)
CGA (all modes)	*	*	*	
MDA (all modes)	*	*	•	*
EGA (all modes)	*	*	*	*
132 Col x 25 Line Text	*		*	
132 Col x 43 Line Text	*	*	*	
Hercules	*	*	*	
Hercules in color	*	*		
Extended EGA 640 x 480	*			
Extended EGA 752 x 410	*			
High Res 800 x 600	*			
PS/2 VGA 640 x 480	*			

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