ARK Logic Inc.

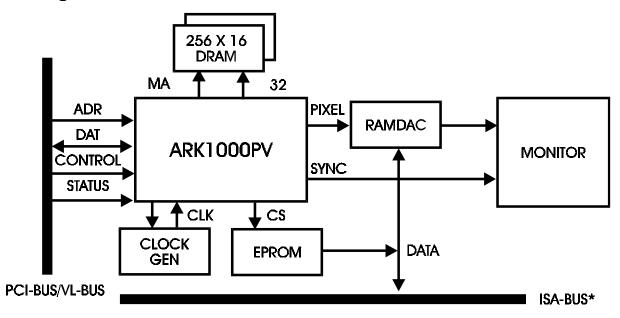# ARK1000PV PCI/VL-BUS GUI Accelerator

General Description

The ARK Logic ARK1000PV is the newest in video accelera-tion technology on the market today. Its superior features and lightening fast performance dramatically boosts graphics-based applications like Windows-based programs, desktop publishing and CAD to another level of performance. And with support of up to 2 Megabytes of DRAM and 16.7 million colors, PCI/VESA VL-BUS interface, and comprehensive manufacturing support, the ARK1000PV is the best choice for low-cost high performance GUI accelerators available.

Features

- Glueless PCI LOCAL BUS Interface (rev 2.0)
- Direct 32-bit VESA VL-BUS Interface for Pentium, 486 DX2, DX, and SX series
- Advanced Graphics Co-processor accelerates applications running under GUI operating systems such as Microsoft Windows 3.x,™ Nt,™ OS/2™
- Extensive graphics functions
- Graphics acceleration for 4, 8, 16 and 24 bit pixels
- 32-bit memory-mapped Graphics Co-processor registers to reduce programming overhead

- Graphics hardware cursor 64 x 64 x 2 or 32 x 32 x 2
- Linear addressing provides CPU direct access to frame buffer memory
- 100% register and BIOS compatible with IBM VGA
- Support VESA super VGA modes
- Support 132-column text modes
- Advanced write buffer design allows for sustained Zero-Wait-State CPU writes at 50 Mhz LCLK (VESA LOCAL BUS)
- Support up to 2 Mbytes of DRAM for 1600 x 1200 x 256 colors
- Support 256 x 4, 256 x 8, and 256 x 16 DRAM configu-rations
- Memory Clock up to 80 Mhz for fast DRAM with page cycle down to 25 ns
- Display Resolutions up to 1600 x 1200
- Support VESA DPMS (Green PC)
- SynDAC,™ GENDAC,™ Combined Clock Gen. and RAMDAC) Interface
- Complete BIOS and GUI Drivers support
- Complete PCI/VL-BUS PC board layout and manufactur-ing support
- 160-pin PQFP package, advance submicron CMOS technology

Block Diagram

*ONLY REQUIRED ON VL-BUS IMPLEMENTATION

NOTES