

## **TOPCAT 286/386SX CHIP SET**

## **FEATURES**

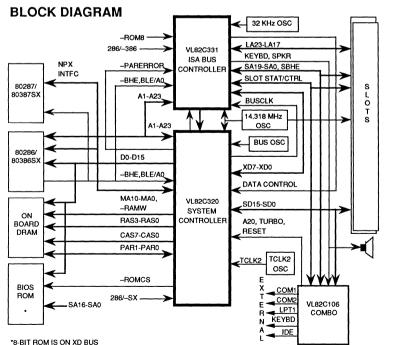
- Two chip PC/AT-compatible chip set capable of use in 286- or 386SXbased systems up to 25 MHz
- Both chips are 160 quad flatpacks, 1.0- and 1.5-micron CMOS
- Memory control of one to four banks of 16 bit DRAM using 256K, 1M, or 4M components allowing 32M bytes on system board
- Page mode DRAM operation on any number of banks
- Two/four-way interleaving or direct access on system board memory
- Programmable option for block or word interleave
- Programmable DRAM timing parameters
- Remap option allows logical reordering of system board DRAM banks
- System board refresh optionally decoupled from slot bus refresh
- Staggered refresh minimizes power supply load variations

- Built-in "sleep" mode features, including use of slow refresh DRAMS in power critical operations
- EMS hardware supports full LIM EMS 4.0° spec over entire 32M byte memory map with backfill to 256K includes two sets of 36 mapping registers each
- Shadow RAM support in 16K increments over entire 640K to 1M range
- Support for 287 or 387SX numerical coprocessors
- Software coprocessor reset can be disabled
- Internal switching and programmable CLK2 support for slow and "turbo" modes
- Programmable drive on DRAM and slot bus interface signals allows direct drive tailored to system size
- Asynchronous or synchronous slot bus operation with programmable bus clock divider

- Bus "quiet" mode assures that slot bus signal lines are driven only during slot accesses
- Integrated peripheral functions: Two 82C37A DMA controllers
  Two 82C59A interrupt controllers
  One 82C54 timer

One 82C018 real time clock

- Supports 8- or 16-bit wide BIOS ROMs
- I/O decode programmable for 10- or 16-bit addresses
- Separate parity generators/checkers for high speed operation
- Designed for systems with up to 12 MHz backplane operation
- Three-state control pins added for board level testability
- Compatible with Lotus 1-2-3® version 3.0 in 1M systems



## ORDER INFORMATION

VL82C286/386SX Chip SetPart NumberPackage1 - VL82C320-FCPlastic Flatpack1 - VL82C331-FCPlastic Flatpack

**Note:** Operating temperature range is 0°C to +70°C.

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