VLSI TECHNOLOGY, INC.

VL82C102A

PC/AT-COMPATIBLE MEMORY CONTROLLER

FEATURES

- Fully compatible with IBM PC/AT-type designs
- Completely performs memory control function in IBM PC/AT-compatible systems
- Replaces 20 integrated circuits on PC/AT-type motherboard
- Support 12 MHz processor clock
- Device is available as "cores" for user-specific designs
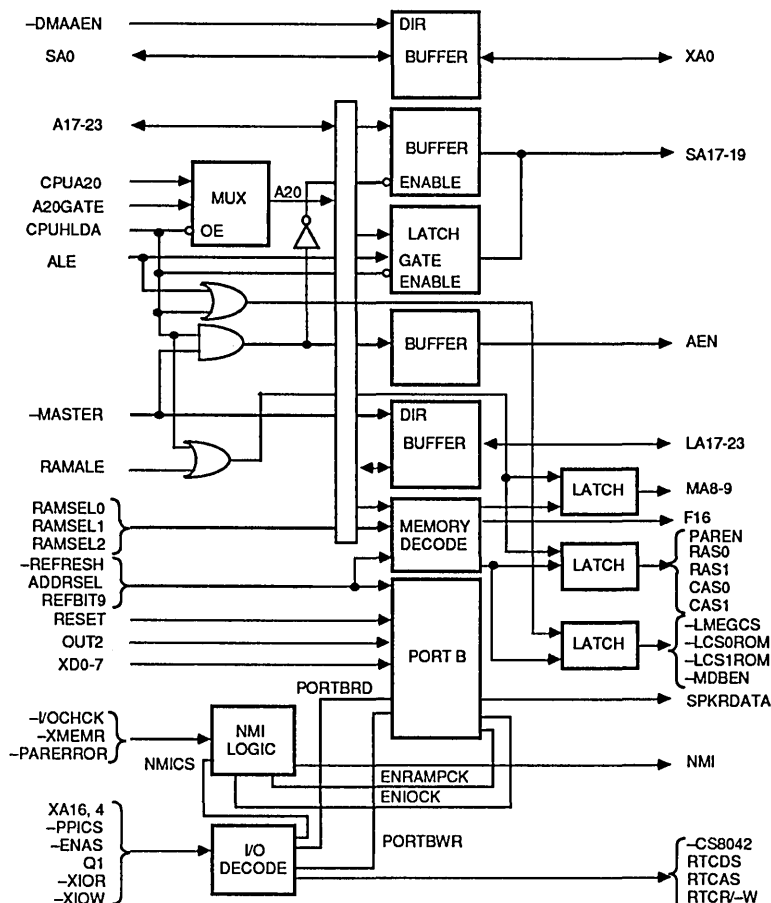- Designed in CMOS for low power consumption

DESCRIPTION

The VL82C102A PC/AT-Compatible Memory Controller generates the row address strobe (RAS) and column address strobe (CAS) necessary to support the dynamic RAMs used in PC/AT-type systems. In addition, the device allows five motherboard memory options for the user, up to a full 4M-byte system. Four of the five options allow a full 640k-bytes user area to support the disk operating system (DOS). In addition, the VL82C102A provides the upper addresses to the I/O slots, the chip select for the ROM and RAM memory, and drives the system's speaker.

The device is manufactured with VLSI's advanced high-performance CMOS process and is available in a JEDEC-standard 84-pin plastic leaded chip carrier (PLCC) package. The VL82C102A is individually available, or may be purchased as part of the complete five-device IBM PC/AT-compatible kit.

BLOCK DIAGRAM

ORDER INFORMATION

Part Number	Package
VL82C102A-QC	Plastic Leaded Chip Carrier (PLCC)

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

PLEASE CONSULT PC/AT-COMPATIBLE USERS MANUAL FOR DETAILED INFORMATION