

# Am8228 • Am8238

## System Controller and Bus Driver for 8080A Compatible Microprocessors

### Distinctive Characteristics

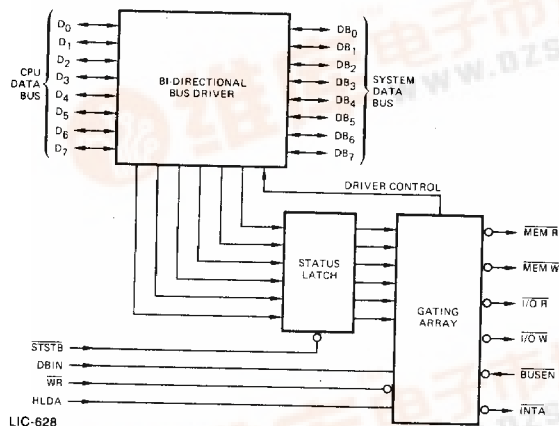
- Multi-byte instruction interrupt acknowledge
- Selectable single level vectored interrupt (RST-7)
- 28-pin molded or hermetic DIP package
- Single chip system controller and data bus driver for Am9080/8080A systems
- Am8238-4 high speed version available for use with 1μsec instruction cycle of Am9080A-4
- Bi-directional three-state bus driver for CPU independent operation
- Advanced low-power Schottky processing
- Available in military and commercial temperature range
- Am8238 has extended  $\overline{IOW}/\overline{MEMW}$  pulse width

### FUNCTIONAL DESCRIPTION

The Am8228 and Am8238 are single chip System Controller Data Bus drivers for the Am9080A Microcomputer System. They generate all control signals required to directly interface Am9080A/8080A compatible system circuits (memory and I/O) to the CPU.

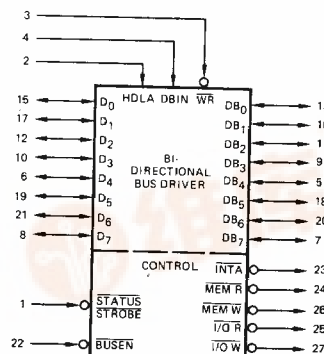
Bi-directional bus drivers with three-state outputs are provided for the system data bus, facilitating CPU independent bus operations such as direct memory access. Interrupt processing is accommodated by means of a single vectored interrupt or by means of the standard 8080A multiple byte interrupt vector operation.

### LOGIC DIAGRAM



LIC-628

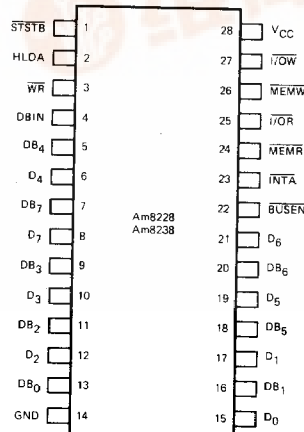
### LOGIC SYMBOL



VCC = Pin 28  
GND = Pin 14

LIC-629

### CONNECTION DIAGRAM Top View



### ORDERING INFORMATION

| Package Type | Temperature Range | Am8228 Order Number | Am8238 Order Number |
|--------------|-------------------|---------------------|---------------------|
| Molded DIP   | 0°C to +70°C      | AM8228PC            | AM8238PC            |
| Hermetic DIP | 0°C to +70°C      | D8228               | D8238               |
| Hermetic DIP | -55°C to +125°C   | AM8228DM            | AM8238DM            |
| Dice         | 0°C to +70°C      | AM8228XC            | AM8238XC            |
| Hermetic DIP | 0°C to +70°C      |                     | AM8238-4DC*         |
| Molded DIP   | 0°C to +70°C      |                     | AM8238-4PC*         |

For use with Am9080A-4 with minimum clock period of 250ns.