Am8228 • Am8238

System Controller and Bus Driver for 8080A Compatible Microprocessors
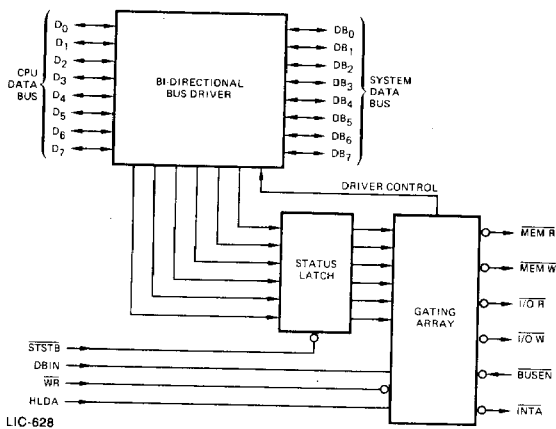
Distinctive Characteristics

- 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.
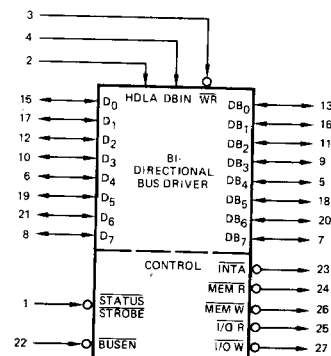
LOGIC SYMBOL

V_{CC} = Pin 28
GND = Pin 14

LIC-629

LOGIC DIAGRAM

LIC-628

CONNECTION DIAGRAM
Top View

Note: Pin 1 is marked for orientation.

LIC-630

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*

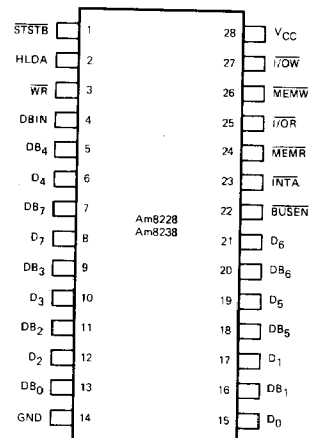*For use with Am9080A-4 with minimum clock period of 250ns.