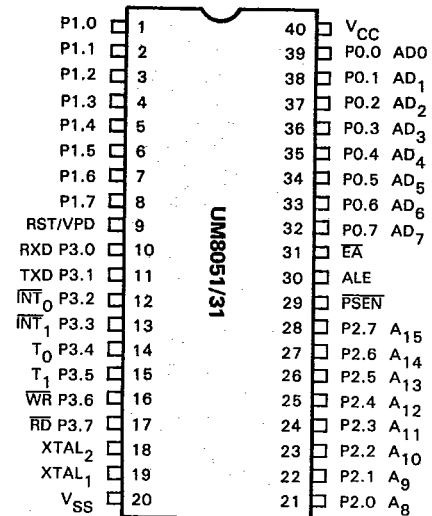


UM8051/31 Single Chip 8-Bit Microcomputer**FEATURES**

- 4K x 8 ROM
- 128 x 8 RAM
- Four 8-bit Ports, 32 I/O Lines
- Two 16-bit Timer/Event Counters
- High-Performance Full-Duplex Serial Channel
- External Memory Expandable to 128K
- Compatible with 8080 and 8085 Peripherals
- Boolean Processor
- 8048 Architecture Enhanced with:
 - Non-paged Jumps
 - Direct Addressing
 - Four 8-Register Banks
 - Stack Depth up to 128-Bytes
 - Multiply, Divide, Subtract, Compare
- Most Instructions Execute in 1 μ s
- 4 μ s Multiply and Divide

PIN CONFIGURATION**UM6845** CRT Controller**FEATURES**

- Applications Include Smart, Programmable, Intelligent CRT Terminals; Video Games; Information Display.
- Alphanumeric, Semi-Graphic, and Full Graphic Capability.
- Fully Programmable via Processor Data Bus and Can Generate Timing for Almost Any Alphanumeric Screen Density.
- Single +5 Volt Supply, TTL Compatible I/O, NMOS Technology.
- Hardware Scrolling by Page, Line or Character.
- Providing CPU's with Synchronous Signals to External Device.
- Programmable Cursor Format.
- Light Pen Registers and Input Strobe Signal to Latch the Light Pen Position on Screen.
- Line Buffer-less Operation. No External DMA Required. Reading Screen Memory Is Multiplexed Between CRTC and CPU.
- Programmable Interlace or Non-interlace Scan.
- 14-bit Wide Display Memory Reading Address.

PIN CONFIGURATION