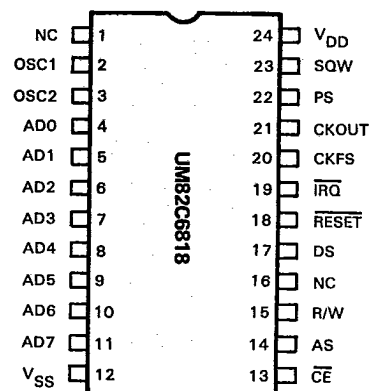


**UM82C6818** Real Time Clock Plus RAM (RTC)**FEATURES**

- Internal Time Base and Oscillator
- Counts Seconds, Minutes, and Hours of the Day
- Counts Days of the Week, Date, Month, and Year
- 3V to 6V Operation
- Time Base Input Options: 4.194304 MHz, 1.048576 MHz or 32.768 KHz.
- Time Base Oscillator for Parallel Resonant Crystals
- Binary or BCD Representation of Time, Calendar, and Alarm
- 12 or 24-Hour Clock with AM and PM in 12-Hour Mode
- Automatic End of Month Recognition
- Automatic Leap Year Compensation
- Multiplexed Bus for Pin Efficiency
- Interfaced with Software as 64 RAM Locations:
  - 14 Bytes of Clock and Control Registers
  - 50 Bytes of General Purpose RAM
- Status Bit Indicates Data Integrity
- Bus Compatible Interrupt Signals (IRQ)
- Three Interrupts are Separately Software Maskable and Testable:
  - Time-of-day Alarm. Once-per-second to Once-per-day
  - Periodic Rates from 30.5  $\mu$ s to 500 ms
  - End-of-clock Update Cycle
- Programmable Square-wave Output Signal
- Clock Output may be used as Microprocessor Clock Input:
  - At Time Base Frequency  $\div 1$  or  $\div 4$

**PIN CONFIGURATION****UM82C8167** Microprocessor Real Time Clock (RTC)**FEATURES**

- Microprocessor Compatible (8-bit Data Bus)
- Milliseconds through Month Counters
- 56 Bits of RAM with Comparator to Compare the Real Time Counter to the RAM Data
- 2 INTERRUPT OUTPUTS with 8 Possible Interrupt Signals
- POWER DOWN Input That Disables All Inputs and Outputs Except for One of the Interrupts
- Status Bit to Indicate Rollover during a Read
- 32,768 Hz Crystal Oscillator
- Four-year Calendar (No Leap Year)
- 24-hour Clock

**PIN CONFIGURATION**